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SEQUENCE LISTING

<110> diaDexus, Inc.
Macina, Roberto
Turner, Leah
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Chen, Huei-Mei
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<120> Compositions, Splice Variants and Methods Relating to Breast Specific Genes and Proteins

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<151> 2002-12-05

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42

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420 425 430

Gln Ser Gln Arg Asn Gln Leu Gln Gly Ala Met Gln Gln Phe Asn Gln 435 440 445

Arg Tyr Leu Tyr Ser Ala Ser Met Leu Ala Ala Glu Asn Asp Pro Tyr 450 455 460

Gly Pro Leu Pro Pro Gly Trp Glu Lys Arg Val Asp Ser Thr Asp Arg 465 470 475 480

Val Tyr Phe Val Asn His Asn Thr Lys Thr Thr Gln Trp Glu Asp Pro
485 490 495

Arg Thr Gln Gly Leu Gln Asn Glu Glu Thr Leu Gly Arg Arg Leu Arg 500 510

Gln Phe Arg Ile Phe Ser Val Lys Val Leu Arg Ser Pro Cys Cys Thr 515 520 525

His Ser Thr Gln Gln Pro Thr Pro Phe Pro Arg Leu Leu Arg Met Arg 530 535 540

Lys Pro Thr Asp Thr Ser Asn Gly Gly Pro Ala Asn Cys Pro Thr Glu 545 550 555 560

Arg Arg Leu Gln Val Lys Pro Ala Lys Tyr Pro Lys Met Gly Pro Ser 565 570 575

Leu Met Ala Tyr Pro Arg Thr Gly Thr Asn Thr Ala Ser Pro Gly Gln 580 585 590

Gln Ser Ala Thr Glu Pro Pro Pro Thr Lys Met Gly Gln Thr Pro Gln 595 600 605

Asp Arg Glu Gly Arg His Arg Asn Leu Thr Ala Glu Pro Ser Thr Asn 610 615 620

Gln Gly Thr Arg Lys Glu Pro Thr Pro Gln Arg Thr Thr His Ser Ala 625 630 635 640

Asp Ala Gln Pro Thr

<210> 99 <211> 125

PCT/US2003/038815

<212> PRT

WO 2004/053077

<213> Homo sapien

<400> 99

Met Gly Pro Gly Gly Pro Leu Leu Ser Pro Ser Arg Gly Phe Leu Leu 1 5 10 15

Cys Lys Thr Gly Trp His Ser Asn Arg Leu Leu Gly Asp Cys Gly Pro

His Thr Pro Val Ser Thr Ala Leu Ser Phe Ile Ala Val Gly Met Ala 35 40 45

Ala Pro Ser Met Lys Glu Arg Gln Val Cys Trp Gly Ala Arg Asp Glu 50 55 60

Tyr Trp Lys Cys Leu Asp Glu Asn Leu Glu Asp Ala Ser Gln Cys Lys 65 70 75 80

Lys Leu Arg Ser Ser Phe Glu Ser Ser Cys Pro Gln Gln Trp Ile Lys 85 90 95

Tyr Phe Asp Lys Arg Arg Asp Tyr Leu Lys Phe Lys Glu Lys Phe Glu
100 105 110

Ala Gly Gln Phe Glu Pro Ser Glu Thr Thr Ala Lys Ser

<210> 100

<211> 164

<212> PRT

<213> Homo sapien

<400> 100

Phe Phe Leu Glu Pro Cys Ala Pro Leu Leu Ala Glu Pro Leu Leu Glu 1 5 10 10 15

Arg Asp Glu Ala Glu Gly Val Gly Gly Ala Asp Ala Gly Pro Ala Leu 20 25 30

Leu Tyr Gly Leu Val Gly Asp Gly Glu Leu Ala Gln Val Val Ala Asn 35 40 45

His Leu Gly Leu Asp Leu His Leu Val Glu Gly Leu Ala Val Val Asp 50 55 60

Ala His His Ala Ala His His Leu Gly Gln Asp Asp His Val Pro Gln

135

65 70 75 80

Val Arg Leu His His Phe Arg Leu Leu His Gly Arg Arg Leu Leu

Gly Leu Ala Gln Ala Leu Gln Gln Gly Val Leu Leu Pro Pro Gln Ala 100 105

Pro Val Gln Pro Pro Pro Leu Ala Arg Thr Val Gln Leu His Gln Leu 115 120

Leu Val Gly His Val Gln Gln Leu Val Glu Val His Ala Ala Leu His 135

Arg Ser Arg Asn Gly Ser Pro Ile Tyr Glu Gly Lys Thr Gly Leu Leu 150

Gly Gly Pro Gly

<210> 101 <211> 129

<212> PRT

<213> Homo sapien

<400> 101

Phe Phe Leu Glu Pro Cys Ala Pro Leu Leu Ala Glu Pro Leu Leu Glu

Arg Asp Glu Ala Glu Gly Val Gly Gly Ala Asp Ala Gly Pro Ala Leu 20

Leu Tyr Gly Leu Val Gly Asp Gly Glu Leu Ala Gln Val Val Ala Asn

His Leu Gly Leu Asp Leu His Leu Val Glu Gly Leu Ala Val Val Asp

Ala His His Ala His His Leu Gly Gln Asp Asp His Val Pro Gln

Val Arg Leu His His Phe Arg Leu Leu His Gly Arg Arg Leu Leu Leu

Gly Leu Ala Gln Ala Leu Gln Gln Gly Val Leu Leu Pro Pro Gln Ala 100 105

136

Pro Val Gln Pro Pro Arg Trp Arg Ala Leu Tyr Ser Cys Ile Ser Cys 115 120

Ser

<210> 102 <211> 139 <212> PRT

<213> Homo sapien

<400> 102

Asp Pro Arg Trp Ala Leu Tyr Ser Leu Tyr Val Tyr Lys Phe Leu His

Phe Ser Tyr Ser Ser Ala Lys Asn Pro Asp Gly Cys Phe Phe Gln Lys

Val Leu Asn Gly Phe Thr Lys Phe Phe Cys Lys Glu Gln Tyr Cys Lys

Leu Leu Lys Leu Tyr Phe Tyr Arg Leu Phe Ala Leu Leu Trp Ile Leu 50 55

Cys Leu Ser Gly Phe Leu Lys Phe Phe Phe Tyr Ser Glu Ile Met Glu 75

Leu Val Leu Ala Ala Gly Ala Leu Leu Phe Cys Gly Phe Ile Ile

Tyr Asp Thr His Ser Leu Met His Lys Leu Ser Pro Glu Glu Tyr Val 105

Leu Ala Ala Ile Ser Leu Tyr Leu Asp Ile Ile Asn Leu Phe Leu His 115

Leu Leu Arg Phe Leu Glu Ala Val Asn Lys Lys 135

<210> 103

<211> 525

<212> PRT

<213> Homo sapien

<400> 103

Met Gly Asp Leu Glu Leu Leu Pro Gly Glu Ala Glu Val Leu Val 5 10

- Arg Gly Leu Arg Ser Phe Pro Leu Arg Glu Met Gly Ser Glu Gly Trp
- Asn Gln Gln His Glu Asn Leu Glu Lys Leu Asn Met Gln Ala Ile Leu
- Asp Ala Thr Val Ser Gln Gly Glu Pro Ile Gln Glu Leu Leu Val Thr
- His Gly Lys Val Pro Thr Leu Val Glu Glu Leu Ile Ala Val Glu Met
- Trp Lys Gln Lys Val Phe Pro Val Phe Cys Arg Val Glu Asp Phe Lys
- Pro Gln Asn Thr Phe Pro Ile Tyr Met Val Val His His Glu Ala Ser 100
- Ile Ile Asn Leu Leu Glu Thr Val Phe Phe His Lys Glu Val Cys Glu
- Ser Ala Glu Asp Thr Val Leu Asp Leu Val Asp Tyr Cys His Arg Lys
- Leu Thr Leu Leu Val Ala Gln Ser Gly Cys Gly Gly Pro Pro Glu Gly
- Glu Gly Ser Gln Asp Ser Asn Pro Met Gln Glu Leu Gln Lys Gln Ala
- Glu Leu Met Glu Phe Glu Ile Ala Leu Lys Ala Leu Ser Val Leu Arg 180
- Tyr Ile Thr Asp Cys Val Asp Ser Leu Ser Leu Ser Thr Leu Ser Arg 200
- Met Leu Ser Thr His Asn Leu Pro Cys Leu Leu Val Glu Leu Leu Glu
- His Ser Pro Trp Ser Arg Arg Glu Gly Gly Lys Leu Gln Gln Phe Glu
- Gly Ser Arg Trp His Thr Val Ala Pro Ser Glu Gln Gln Lys Leu Ser

- Lys Leu Asp Gly Gln Val Trp Ile Ala Leu Tyr Asn Leu Leu Ser 265 270
- Pro Glu Ala Gln Ala Arg Tyr Cys Leu Thr Ser Phe Ala Lys Gly Arg
- Leu Leu Lys Val Arg Leu Pro Pro His Gln Pro Pro Gln Pro Gln Tyr 290 295 300
- Arg Pro Pro His Pro Thr Pro Thr Ala Ser Leu Leu Phe Ile Phe Ala 305 310 315 320
- His Pro Pro Gln Pro Gln Cys Ser Phe Gln Ser Leu Gly Leu Ser Asp 325 330 335
- Thr Pro Ala Ser Gly Thr Trp Ala Pro Thr Gly Ile Leu Ser Pro Thr 340 345 350
- Gln Pro Leu Pro Phe Pro Trp Pro Pro Gly Gln His Leu His His Thr 355 360 365
- Gly Leu His Trp Thr Pro Leu Gln Leu Arg Ala Phe Leu Thr Asp Thr 370 375 380
- Leu Leu Asp Gln Leu Pro Asn Leu Ala His Leu Gln Ser Phe Leu Ala 385 390 395 400
- His Leu Thr Leu Thr Glu Thr Gln Pro Pro Lys Lys Asp Leu Val Leu 405 410 415
- Glu Gln Ile Pro Glu Ile Trp Glu Arg Leu Glu Arg Glu Asn Arg Gly
 420 425 430
- Lys Trp Gln Ala Ile Ala Lys His Gln Leu Gln His Val Phe Ser Pro
 435 440 445
- Ser Glu Gln Asp Leu Arg Leu Gln Ala Arg Arg Trp Ala Glu Thr Tyr 450 455 460
- Arg Leu Asp Val Leu Glu Ala Val Ala Pro Glu Arg Pro Arg Cys Ala
 465 470 475 480
- Tyr Cys Ser Ala Glu Ala Ser Lys Arg Cys Ser Arg Cys Gln Asn Glu 485 490 495

139

Trp Tyr Cys Cys Arg Glu Cys Gln Val Lys His Trp Glu Lys His Gly

Lys Thr Cys Val Leu Ala Ala Gln Gly Asp Arg Ala Lys 520

<210> 104 <211> 385 <212> PRT

<213> Homo sapien

<400> 104

Pro Phe Pro Trp Leu Arg Glu Leu Thr Leu Pro Asn Arg Pro Ala Thr

Val Leu Ser Gln Thr Leu Ala Pro Ser Gly Ser Val Val Pro Glu Cys 20 25

Asp Ser Ile Pro Thr Pro Ala Ala Ala Gln Asp Pro Pro Asp Pro Gly 40

Leu Asp Met Gly Asp Leu Glu Leu Leu Pro Gly Glu Ala Glu Val

Leu Val Arg Gly Leu Arg Ser Phe Pro Leu Arg Glu Met Gly Ser Glu

Gly Trp Asn Gln Gln His Glu Asn Leu Glu Lys Leu Asn Met Gln Ala

Ile Leu Asp Ala Thr Val Ser Gln Gly Glu Pro Ile Gln Glu Leu Leu 105 100

Val Thr His Gly Lys Val Pro Thr Leu Val Glu Glu Leu Ile Ala Val 120

Glu Met Trp Lys Gln Lys Val Phe Pro Val Phe Cys Arg Val Glu Asp 135 140

Phe Lys Pro Gln Asn Thr Phe Pro Ile Tyr Met Val Val His His Glu 150 145

Ala Ser Ile Ile Asn Leu Leu Glu Thr Val Phe Phe His Lys Glu Val 165 170

Cys Glu Ser Ala Glu Asp Thr Val Leu Asp Leu Val Asp Tyr Cys His 185 180

Arg Lys Leu Thr Leu Leu Val Ala Gln Ser Gly Cys Gly Gly Pro Pro 195 200 205

Glu Gly Glu Gly Ser Gln Asp Ser Asn Pro Met Gln Glu Leu Gln Lys 210 215 220

Gln Ala Glu Leu Met Glu Phe Glu Ile Ala Leu Lys Ala Leu Ser Val 225 230 235 240

Leu Arg Tyr Ile Thr Asp Cys Val Asp Ser Leu Ser Leu Ser Thr Leu 245 250 255

Ser Arg Met Leu Ser Thr His Asn Leu Pro Cys Leu Leu Val Glu Leu 265 270

Leu Glu His Ser Pro Trp Ser Arg Arg Glu Gly Gly Lys Leu Gln Gln 275 280 285

Phe Glu Gly Ser Arg Trp His Thr Val Ala Pro Ser Glu Gln Gln Lys 290 295 300

Leu Ser Lys Leu Asp Gly Gln Val Trp Ile Ala Leu Tyr Asn Leu Leu 305 310 315 320

Leu Ser Pro Glu Ala Gln Ala Arg Tyr Cys Leu Thr Ser Phe Ala Lys

Gly Arg Leu Leu Lys Val Arg Leu Pro Pro His Gln Pro Pro Gln Pro 340 345 350

Gln Tyr Arg Pro Pro His Pro Thr Pro Thr Ala Ser Leu Leu Phe Ile 355 360 365

Phe Ala His Pro Pro Gln Pro Gln Cys Ser Phe Gln Ser Leu Gly Leu 370 375 380

Arg 385

<210> 105

<211> 438

<212> PRT

<213> Homo sapien

<400> 105

141

Met Asp Glu Ile Glu Lys Tyr Gln Glu Val Glu Glu Asp Gln Asp Pro 1 5 10 15

Ser Cys Pro Arg Leu Ser Arg Glu Leu Leu Asp Glu Lys Glu Pro Glu 20 25 30

Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Gly Tyr 35 40 45

Leu Glu Leu Pro Asp Leu Gly Gln Pro Tyr Ser Ser Ala Val Tyr Ser 50 55 60

Leu Glu Glu Gln Tyr Leu Gly Leu Ala Leu Asp Val Asp Arg Ile Lys 65 70 75 80

Lys Asp Gln Glu Glu Glu Asp Gln Gly Pro Pro Cys Pro Arg Leu 85 90 95

Ser Arg Glu Leu Leu Glu Val Val Glu Pro Glu Val Leu Gln Asp Ser 100 105 110

Leu Asp Arg Cys Tyr Ser Thr Pro Ser Ser Cys Leu Glu Gln Pro Asp 115 120 125

Ser Cys Gln Pro Tyr Gly Ser Ser Phe Tyr Ala Leu Glu Glu Lys His 130 135 140

Val Gly Phe Ser Leu Asp Val Gly Glu Ile Glu Lys Lys Gly Lys Gly 145 150 155 160

Lys Lys Arg Arg Gly Arg Arg Ser Lys Lys Glu Arg Arg Arg Gly Arg 165 170 175

Lys Glu Glu Glu Asp Gln Asn Pro Pro Cys Pro Arg Leu Ser Arg 180 . 185 190

Glu Leu Leu Asp Glu Lys Gly Pro Glu Val Leu Gln Asp Ser Leu Asp 195 200 205

Arg Cys Tyr Ser Thr Pro Ser Gly Cys Leu Glu Leu Thr Asp Ser Cys 210 215 220

Gln Pro Tyr Arg Ser Ala Phe Tyr Val Leu Glu Gln Gln Arg Val Gly
225 230 235 240

Leu Ala Val Asp Met Asp Glu Ile Glu Lys Tyr Gln Glu Val Glu Glu

142

245 250 255

Asp Gln Asp Pro Ser Cys Pro Arg Leu Ser Arg Glu Leu Leu Asp Glu 260 265 270

Lys Glu Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr 275 280 285

Pro Ser Gly Tyr Leu Glu Leu Pro Asp Leu Gly Gln Pro Tyr Ser Ser 290 295 300

Ala Val Tyr Ser Leu Glu Glu Gln Tyr Leu Gly Leu Ala Leu Asp Val 305 310 315 320

Asp Lys Ile Glu Lys Lys Gly Lys Gly Lys Lys Arg Arg Gly Arg Arg 325 330 335

Ser Lys Lys Glu Arg Arg Arg Gly Ser Lys Glu Gly Glu Glu Asp Gln 340 345 350

Asn Pro Pro Cys Pro Arg Leu Ser Gly Val Leu Met Glu Val Glu Glu 355 360 365

Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser 370 375 380

Met Tyr Phe Glu Leu Pro Asp Ser Phe Gln His Tyr Arg Ser Val Phe 385 390 395 400

Tyr Ser Phe Glu Glu Gln His Ile Ser Phe Ala Leu Asp Val Asp Asn . 405 410 415

Arg Phe Leu Thr Leu Met Gly Thr Ser Leu His Leu Val Phe Gln Met 420 425 430

Gly Val Ile Phe Pro Gln 435

<210> 106

<211> 334

<212> PRT

<213> Homo sapien

<400> 106

Ser Leu Lys Ser Cys Arg Thr His Trp Ile Asp Val Ile Gln Leu Leu 1 5 10 15

- Pro Val Val Leu Asn Ser Leu Thr Pro Ala Ser Pro Met Glu Val Pro 25
- Phe Met His Trp Arg Lys Asn Met Leu Ala Phe Leu Leu Thr Trp Glu
- Lys Leu Lys Arg Arg Gly Arg Gly Arg Lys Glu Gly Glu Glu Asp Gln 50 55
- Arg Arg Lys Glu Arg Arg Gly Arg Lys Glu Gly Glu Glu Asp Gln Asn 75
- Pro Pro Cys Pro Arg Leu Ser Arg Glu Leu Leu Asp Glu Lys Gly Pro
- Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Gly 100 105
- Cys Leu Glu Leu Thr Asp Ser Cys Gln Pro Tyr Arg Ser Ala Phe Tyr
- Val Leu Glu Gln Gln Arg Val Gly Leu Ala Val Asp Met Asp Glu Ile 130
- Glu Lys Tyr Gln Glu Val Glu Glu Asp Gln Asp Pro Ser Cys Pro Arg 150 155
- Leu Ser Arg Glu Leu Leu Asp Glu Lys Glu Pro Glu Val Leu Gln Asp
- Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Gly Tyr Leu Glu Leu Pro 180
- Asp Leu Gly Gln Pro Tyr Ser Ser Ala Val Tyr Ser Leu Glu Glu Gln
- Tyr Leu Gly Leu Ala Leu Asp Val Asp Lys Ile Glu Lys Lys Gly Lys 210
- Gly Lys Lys Arg Arg Gly Arg Arg Ser Lys Lys Glu Arg Arg Arg Gly 225 230 235
- Ser Lys Glu Glu Glu Asp Gln Asn Pro Pro Cys Pro Arg Leu Ser 245 250 255

144

Gly Val Leu Met Glu Val Glu Glu Pro Glu Val Leu Gln Asp Ser Leu 265 270

Asp Arg Cys Tyr Ser Thr Pro Ser Met Tyr Phe Glu Leu Pro Asp Ser 280

Phe Gln His Tyr Arg Ser Val Phe Tyr Ser Phe Glu Glu Gln His Ile 295

Ser Phe Ala Leu Asp Val Asp Asn Arg Phe Leu Thr Leu Met Gly Thr

Ser Leu His Leu Val Phe Gln Met Gly Val Ile Phe Pro Gln 325

<210> 107

<211> 140 <212> PRT <213> Homo sapien

<400> 107

Met Arg Arg Arg Ser His Ser Thr Arg Leu Ser Ala Gly Gly Ser Trp

Ser Pro His His Leu Leu Ser Pro Ser Tyr Ser Val Lys Ser Arg Asp

Arg Lys Met Val Gly Asp Val Thr Gly Ala Gln Ala Tyr Ala Ser Thr

Ala Lys Cys Leu Asn Ile Trp Ala Leu Ile Leu Gly Ile Leu Met Thr

Ile Gly Phe Ile Leu Leu Val Phe Gly Ser Val Thr Val Ser His 65

Ile Met Phe Gln Asn Asn Thr Gly Lys Thr Gly Leu Leu Val Ala Ala

His Ser Leu Gln Pro Leu His Ser Thr Val Gln Cys Trp Pro Cys Asn 100

Ala Val Ala Val Ala Pro Ala Pro Leu Val Leu Pro Leu Asn Thr Ala 115 120

Val Tyr Thr His Thr Pro Val Tyr Ser Val Ile Gln 130 135

<210> 108 <211> 114

<212> PRT

<213> Homo sapien

<220>

<221> MISC_FEATURE <222> (53)..(53) <223> X=any amino acid

<220>

<221> MISC_FEATURE

<222> (82)..(82) <223> X=any amino acid

<220>

<221> MISC_FEATURE

<222> (94)..(94)

<223> X=any amino acid

<400> 108

Gly Gln Glu Asp Gly Trp Arg Arg Asp Arg Gly Pro Gly Leu Cys Leu

His Arg Gln Val Pro Glu His Leu Gly Pro Asp Ser Gly His Pro His 25

Asp His Trp Ile His Pro Val Thr Gly Ile Arg Leu Cys Asp Ser Leu

Pro Tyr Tyr Val Xaa Asp Asn Thr Gly Lys Thr Gly Leu Leu Val Ala 50

Ala His Ser Leu Gln Pro Leu His Ser Thr Val Gln Cys Trp Pro Cys

Thr Xaa Gly Cys Cys Pro Cys Pro Leu Gly Pro Ala Pro Xaa Tyr Ser

Ser Leu Tyr Pro His Thr Cys Leu Gln Cys His Ser Ile Lys Arg Thr 100 105

Cys Leu

<210> 109

<211> 182

146

<212> PRT

<213> Homo sapien

<400> 109

Met Glu Glu Met Lys Asn Glu Ala Glu Thr Thr Ser Met Val Ser Met 5

Pro Leu Tyr Ala Val Met Tyr Pro Val Phe Asn Glu Leu Glu Arg Val 20

Asn Leu Ser Ala Ala Gln Thr Leu Arg Ala Ala Phe Ile Lys Ala Glu

Lys Glu Asn Pro Gly Leu Thr Gln Asp Ile Ile Met Lys Ile Leu Glu

Lys Lys Ser Val Glu Val Asn Phe Thr Glu Ser Leu Leu Arg Met Ala 70

Ala Asp Asp Val Glu Glu Tyr Met Ile Glu Arg Pro Glu Pro Glu Phe

Gln Asp Leu Asn Glu Lys Ala Arg Ala Leu Lys Gln Ile Leu Ser Lys 100

Ile Pro Asp Glu Ile Asn Asp Arg Val Arg Phe Leu Gln Thr Ile Lys 120

Ala Leu Glu His Gln Lys Lys Glu Phe Val Lys Tyr Ser Lys Ser Phe

Ser Asp Thr Leu Lys Thr Tyr Phe Lys Asp Gly Lys Ala Ile Asn Val 150

Phe Val Ser Ala Asn Arg Leu Ile His Gln Thr Asn Leu Ile Leu Gln

Thr Phe Lys Thr Val Ala 180

<210> 110

<211> 141 <212> PRT <213> Homo sapien

<400> 110

Met Arg Met Thr Met Glu Glu Met Lys Asn Glu Ala Glu Thr Thr Ser

WO 2004/053077 PCT/US2003/038815

147

1 5 10 15

Met Val Ser Met Pro Leu Tyr Ala Val Met Tyr Pro Val Phe Asn Glu 20 25 30

Leu Glu Arg Val Asn Leu Ser Ala Ala Gln Thr Leu Arg Ala Ala Phe 35 40 45

Ile Lys Ala Glu Lys Glu Asn Pro Gly Leu Thr Gln Asp Ile Ile Met
50 55 60

Lys Ile Leu Glu Lys Lys Ser Val Glu Val Asn Phe Thr Glu Ser Leu 65 70 75 80

Leu Arg Met Ala Ala Asp Asp Val Glu Glu Tyr Met Ile Glu Arg Pro 85 90 95

Glu Pro Glu Phe Gln Asp Leu Asn Glu Lys Ala Arg Ala Leu Lys Gln
100 105 110

Ile Leu Ser Lys Ile Pro Asp Glu Ile Asn Asp Arg Val Arg Phe Leu 115 120 125

Gln Thr Ile Lys His Leu Asn Thr Lys Arg Lys Asn Leu 130 135 140

<210> 111

<211> 132

<212> PRT

<213> Homo sapien

<400> 111

Gly Arg Val Pro Leu Ala Leu Gly Val Gln Thr Leu Pro Gln Thr Cys
1 5 10 15

Asp Glu Pro Lys Ala His Thr Ser Phe Gln Ile Ser Leu Ser Val Ser 20 25 30

Tyr Thr Gly Ser Ser Gly Arg Pro Gly Arg Tyr Glu Leu Phe Lys Ser 35 40 45

Ser Pro His Ser Leu Phe Pro Glu Lys Met Val Ser Ser Cys Leu Asp 50 55 60

Ala His Thr Gly Ile Ser His Glu Asp Leu Ile Gln Val Gly Gly Pro 65 70 75 80

148

Pro Ile Ser Leu Gln Ile His Asp Ser Pro Ala Leu Ala Ser Ala Ser 85

Pro Pro Leu Ser Pro Val Pro Pro Leu Tyr Val Val Glu Arg Ala Lys

Ser Gln Ser Cys Val Thr Gly Asp Ser His Phe Pro Cys Leu Ser Ile 120

Ser Phe Phe Tyr 130

<210> 112

<211> 277 <212> PRT

<213> Homo sapien

<400> 112

Met Glu Leu Asp Leu Ser Pro Pro His Leu Ser Ser Pro Glu Asp 10

Leu Cys Pro Ala Pro Gly Thr Pro Pro Gly Thr Pro Arg Pro Pro Asp

Thr Pro Leu Pro Glu Glu Val Lys Arg Ser Gln Pro Leu Leu Ile Pro 35 40

Thr Thr Gly Arg Lys Leu Arg Glu Glu Glu Arg Arg Ala Thr Ser Leu 55 60

Pro Ser Ile Pro Asn Pro Phe Pro Glu Leu Cys Ser Pro Pro Ser Gln 75

Ser Pro Ile Leu Gly Gly Pro Ser Ser Ala Arg Gly Leu Leu Pro Arg 85

Asp Ala Ser Arg Pro His Val Val Lys Val Tyr Ser Glu Asp Gly Ala 100

Cys Arg Ser Val Glu Val Ala Ala Gly Ala Thr Ala Arg His Val Cys 115

Glu Met Leu Val Gln Arg Ala His Ala Leu Ser Asp Glu Thr Trp Gly 130 135 140

Leu Val Glu Cys His Pro His Leu Ala Leu Glu Arg Gly Leu Glu Asp

155 145 150 160

His Glu Ser Val Val Glu Val Gln Ala Ala Trp Pro Val Gly Gly Asp 170

Ser Arg Phe Val Phe Arg Lys Asn Phe Ala Lys Tyr Glu Leu Phe Lys

Ser Ser Pro His Ser Leu Phe Pro Glu Lys Met Val Ser Ser Cys Leu 200

Asp Ala His Thr Gly Ile Ser His Glu Asp Leu Ile Gln Val Gly Gly 210 215

Pro Pro Ile Ser Leu Gln Ile His Asp Ser Pro Ala Leu Ala Ser Ala 230

Ser Pro Pro Leu Ser Pro Val Pro Pro Leu Tyr Val Val Glu Arg Ala 250

Lys Ser Gln Ser Cys Val Thr Gly Asp Ser His Phe Pro Cys Leu Ser 265

Ile Ser Phe Phe Tyr 275

<210> 113 <211> 155 <212> PRT <213> Homo sapien

<400> 113

Met Phe Leu Val Leu Ala Arg Ala Cys Gln Leu Leu Gln Ile Cys Leu

Lys Glu Ser Leu Phe Ala Tyr Leu Gly Leu Ser Pro Pro Ser Tyr Thr 20

Phe Pro Ala Pro Ala Ala Val Ile Pro Thr Glu Ala Ala Ile Tyr Gln

Pro Ser Val Ile Leu Asn Pro Arg Ala Leu Gln Pro Ser Thr Ala Tyr 60

Tyr Pro Ala Gly Thr Gln Leu Phe Met Asn Tyr Thr Ala Tyr Tyr Pro 75

150

Ser Pro Pro Gly Ser Pro Asn Ser Leu Gly Tyr Phe Pro Thr Ala Ala 85

Asn Leu Ser Gly Val Pro Pro Gln Pro Gly Thr Val Val Arg Met Gln

Gly Leu Ala Tyr Asn Thr Gly Val Lys Glu Ile Leu Asn Phe Phe Gln 115

Gly Tyr Gln Tyr Ala Thr Glu Asp Gly Leu Ile His Thr Asn Asp Gln 130 135

Ala Arg Thr Leu Pro Lys Glu Trp Val Cys Ile 150

<210> 114

<211> 103

<212> PRT

<213> Homo sapien

<400> 114

Met Val Lys Leu Asn Ser Asn Pro Ser Glu Lys Gly Thr Lys Pro Pro

Ser Val Glu Asp Gly Phe Gln Thr Val Pro Leu Ile Thr Pro Leu Glu 20 25

Val Asn His Leu Gln Leu Pro Ala Pro Glu Lys Val Ile Val Lys Thr 35

Arg Thr Glu Tyr Gln Pro Glu Gln Lys Asn Lys Gly Lys Phe Arg Val 50

Pro Lys Ile Ala Glu Phe Thr Val Thr Ile Leu Val Ser Leu Ala Leu 75

Ala Phe Leu Ala Cys Ile Val Phe Leu Val Val Tyr Lys Ala Phe Thr

Tyr Leu Lys Glu Leu Asn Ser 100

<210> 115

<211> 117 <212> PRT <213> Homo sapien

<220>

<221> MISC_FEATURE

<222> (114)..(114) <223> X=any amino acid

<400> 115

Pro Pro Thr Ser Ala Ala Gln Ser Gly Lys Lys Gly Val Arg Met Val

Lys Leu Asn Ser Asn Pro Ser Glu Lys Gly Thr Lys Pro Pro Ser Val

Glu Asp Gly Phe Gln Thr Val Pro Leu Ile Thr Pro Leu Glu Val Asn 40

His Leu Gln Leu Pro Ala Pro Glu Lys Val Ile Val Lys Thr Arg Thr

Glu Tyr Gln Pro Glu Gln Lys Asn Lys Gly Lys Phe Arg Val Pro Lys 75

Ile Ala Glu Phe Thr Val Thr Ile Leu Val Ser Leu Ala Leu Ala Phe 85

Leu Ala Cys Ile Val Phe Leu Val Val Tyr Lys Ala Phe Thr Tyr Leu 100 105

Lys Xaa Leu Asn Ser 115

<210> 116

<211> 454

<212> PRT

<213> Homo sapien

<400> 116

Met Pro Glu Phe Leu Glu Asp Pro Ser Val Leu Thr Lys Asp Lys Leu

Lys Ser Glu Leu Val Ala Asn Asn Val Thr Leu Pro Ala Gly Glu Gln 25

Arg Lys Asp Val Tyr Val Gln Leu Tyr Leu Gln His Leu Thr Ala Arg 35

Asn Arg Pro Pro Leu Pro Ala Gly Thr Asn Ser Lys Gly Pro Pro Asp 55

Phe 65	Ser	Ser	Asp	Glu	Glu 70	Arg	Glu	Pro	Thr	Pro 75	Val	Leu	Gly	Ser	Gly 80
Ala	Ala	Ala	Ala	Gly 85	Arg	Ser	Arg	Ala	Ala 90	Val	Gly	Arg	Lys	Ala 95	Thr
Lys	Lys	Thr	Asp 100	Lys	Pro	Arg	Gln	Glu 105	Asp	Lys	Asp	Asp	Leu 110	Asp	Val
Thr	Glu	Leu 115	Thr	Asn	Glu	Asp	Leu 120	Leu	Ąsp	Gln	Leu	Val 125	Lys	Tyr	Gly
Val	Asn 130	Pro	Gly	Pro	Ile	Val 135	Gly	Thr	Thr	Arg	Lys 140	Leu	Tyr	Glu	ГÀв
Lys 145	Leu	Leu	Lys	Leu	Arg 150	Glu	Gln	Gly	Thr	Glu 155	Ser	Arg	Ser	Ser	Thr 160
Pro	Leu	Pro	Thr	Ile 165	Ser	Ser	Ser	Ala	Glu 170	Asn	Thr	Arg	Gln	Asn 175	Gly
Ser	Asn	Asp	Ser 180	Asp	Arg	Tyr	Ser	Asp 185	Asn	Glu	Glu	Asp	Ser 190	ГÀв	Ile
Glu	Leu	Lys 195	Leu	Glu	Lys	Arg	Glu 200	Pro	Leu	Lys	Gly	Arg 205	Ala	Lys	Thr
Pro	Val 210	Thr	Leu	Lys	Gln	Arg 215	Arg	Val	Glu	His	Asn 220	Gln	Ser	Tyr	Ser
Gln 225	Ala	Gly	Ile	Thr	Glu 230	Thr	Glu	Trp	Thr	Ser 235	Gly	Ser	Ser	Lys	Gly 240
Gly	Pro	Leu	Gln	Ala 245	Leu	Thr	Arg	Glu	Ser 250	Thr	Arg	Gly	Ser	Arg 255	Arg
Thr	Pro	Arg	Lys 260	Arg	Val	Glu	Thr	Ser 265	Glu	His	Phe	Arg	Ile 270	Asp	Gly
Pro	Val	Ile 275	Ser	Glu	Ser	Thr	Pro 280	Ile	Ala	Glu	Thr	Ile 285	Met	Ala	Ser
Ser	Asn 290	Glu	Ser	Leu	Val	Val 295	Asn	Arg	Val	Thr	Gly 300	Asn	Phe	Lys	His

Ala Ser Pro Ile Leu Pro Ile Thr Glu Phe Ser Asp Ile Pro Arg Arg 305 310 315 320

Ala Pro Lys Lys Pro Leu Thr Arg Ala Glu Val Gly Glu Lys Thr Glu 325 330 335

Glu Arg Arg Val Glu Arg Asp Ile Leu Lys Glu Met Phe Pro Tyr Glu 340 345 350

Ala Ser Thr Pro Thr Gly Ile Ser Ala Ser Cys Arg Arg Pro Ile Lys 355 360 365

Gly Ala Ala Gly Arg Pro Leu Glu Leu Ser Asp Phe Arg Met Glu Glu 370 375 380

Ser Phe Ser Ser Lys Tyr Val Pro Lys Tyr Val Pro Leu Ala Asp Val 385 390 395 400

Lys Ser Glu Lys Thr Lys Lys Gly Arg Ser Ile Pro Val Trp Ile Lys 405 410 415

Ile Leu Leu Phe Val Val Val Ala Val Phe Leu Phe Leu Val Tyr Gln
420 425 430

Ala Met Glu Thr Asn Gln Val Asn Pro Phe Ser Asn Phe Leu His Val
435 440 445

Asp Pro Arg Lys Ser Asn 450

<210> 117

<211> 380

<212> PRT

<213> Homo sapien

<400> 117

Met Glu Leu Gly Arg Pro Leu Leu Glu Val Leu Ala Ser Ala Leu Ser 1 5 10 15

Pro Ala Ser Pro Pro Leu Leu Pro Pro Asp Tyr Ile Leu Cys Val Val 20 25 30

Ser Leu Leu Gln Met Lys Asp Leu Gly Ala Glu His Leu Ala Gly His 35 40 45

Glu Gly Val Gln Leu Leu Gly Leu Leu Asn Val Tyr Leu Glu Gln Glu

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154

50 55 60

Glu Arg Phe Gln Pro Arg Glu Lys Gly Leu Ser Leu Ile Glu Ala Thr 65 70 75 80

Pro Glu Asn Asp Asn Thr Leu Cys Pro Gly Leu Arg Asn Ala Lys Val

Glu Asp Leu Arg Ser Leu Ala Asn Phe Phe Gly Ser Cys Thr Glu Thr
100 105 110

Phe Val Leu Ala Val Asn Ile Leu Asp Arg Phe Leu Ala Leu Met Lys 115 120 125

Val Lys Pro Lys His Leu Ser Cys Ile Gly Val Cys Ser Phe Leu Leu 130 135 140

Ala Ala Arg Ile Val Glu Glu Asp Cys Asn Ile Pro Ser Thr His Asp 145 150 155 160

Val Ile Arg Ile Ser Gln Cys Lys Cys Thr Ala Ser Asp Ile Lys Arg 165 170 175

Met Glu Lys Ile Ile Ser Glu Lys Leu His Tyr Glu Leu Glu Ala Thr 180 185 190

Thr Ala Leu Asn Phe Leu His Leu Tyr His Thr Ile Ile Leu Cys His 195 200 205

Thr Ser Glu Arg Lys Glu Ile Leu Ser Leu Asp Lys Leu Glu Ala Gln 210 215 220

Leu Lys Ala Cys Asn Cys Arg Leu Ile Phe Ser Lys Ala Lys Pro Ser 225 230 235 240

Val Leu Ala Leu Cys Leu Leu Asn Leu Glu Val Glu Thr Leu Lys Ser 245 250 255

Val Glu Leu Glu Ile Leu Leu Leu Val Lys Lys His Ser Lys Ile 260 265 270

Asn Asp Thr Glu Phe Phe Tyr Trp Arg Glu Leu Val Ser Lys Cys Leu 275 280 285

Ala Glu Tyr Ser Ser Pro Glu Cys Cys Lys Pro Asp Leu Lys Lys Leu 290 295 300

Val Trp Ile Val Ser Arg Arg Thr Ala Gln Asn Leu His Asn Ser Tyr 310

Tyr Ser Val Pro Glu Leu Pro Thr Ile Pro Glu Gly Gly Cys Phe Asp 330

Glu Ser Glu Ser Glu Asp Ser Cys Glu Asp Met Ser Cys Gly Glu Glu

Ser Leu Ser Ser Pro Pro Ser Asp Gln Glu Cys Thr Phe Phe 355 360

Asn Phe Lys Val Ala Gln Thr Leu Cys Phe Pro Ser 375

<210> 118 <211> 227

<212> PRT

<213> Homo sapien

<220>

<221> MISC_FEATURE

<222> (6)..(6) <223> X=any amino acid

<220>

<221> MISC_FEATURE

<222> (11)..(11)

<223> X=any amino acid

<400> 118

Met Leu Leu Glu Arg Xaa Gln Cys Asp Gly Xaa Arg Arg Gly Arg Gly

Thr Ala Ser Asp Ile Lys Arg Met Glu Lys Ile Ile Ser Glu Lys Leu

His Tyr Glu Leu Glu Ala Thr Thr Ala Leu Asn Phe Leu His Leu Tyr

His Thr Ile Ile Leu Cys His Thr Ser Glu Arg Lys Glu Ile Leu Ser 50 55

Leu Asp Lys Leu Glu Ala Gln Leu Lys Ala Cys Asn Cys Arg Leu Ile 65 70 75

156

Phe Ser Lys Ala Lys Pro Ser Val Leu Ala Leu Cys Leu Leu Asn Leu 85

Glu Val Glu Thr Leu Lys Ser Val Glu Leu Leu Glu Ile Leu Leu Leu 105

Val Lys Lys His Ser Lys Ile Asn Asp Thr Glu Phe Phe Tyr Trp Arg

Glu Leu Val Ser Lys Cys Leu Ala Glu Tyr Ser Ser Pro Glu Cys Cys 135

Lys Pro Asp Leu Lys Lys Leu Val Trp Ile Val Ser Arg Arg Thr Ala

Gln Asn Leu His Asn Ser Tyr Tyr Ser Val Pro Glu Leu Pro Thr Ile

Pro Glu Gly Gly Cys Phe Asp Glu Ser Glu Ser Glu Asp Ser Cys Glu 185

Asp Met Ser Cys Gly Glu Glu Ser Leu Ser Ser Ser Pro Pro Ser Asp

Gln Glu Cys Thr Phe Phe Phe Asn Phe Lys Val Ala Gln Thr Leu Cys 215

Phe Pro Ser 225

<210> 119 <211> 227

<212> PRT

<213> Homo sapien

<400> 119

Met Leu Leu Glu Arg Arg Gln Cys Asp Gly Leu Arg Arg Gly Arg Gly 10

Thr Ala Ser Asp Ile Lys Arg Met Glu Lys Ile Ile Ser Glu Lys Leu 20

His Tyr Glu Leu Glu Ala Thr Thr Ala Leu Asn Phe Leu His Leu Tyr 35

His Thr Ile Ile Leu Cys His Thr Ser Glu Arg Lys Glu Ile Leu Ser 50

157

Leu Asp Lys Leu Glu Ala Gln Leu Lys Ala Cys Asn Cys Arg Leu Ile

Phe Ser Lys Ala Lys Pro Ser Val Leu Ala Leu Cys Leu Leu Asn Leu 85

Glu Val Glu Thr Leu Lys Ser Val Glu Leu Leu Glu Ile Leu Leu

Val Lys Lys His Ser Lys Ile Asn Asp Thr Glu Phe Phe Tyr Trp Arg

Glu Leu Val Ser Lys Cys Leu Ala Glu Tyr Ser Ser Pro Glu Cys Cys 135

Lys Pro Asp Leu Lys Lys Leu Val Trp Ile Val Ser Arg Arg Thr Ala

Gln Asn Leu His Asn Ser Tyr Tyr Ser Val Pro Glu Leu Pro Thr Ile 165 170

Pro Glu Gly Gly Cys Phe Asp Glu Ser Glu Ser Glu Asp Ser Cys Glu 180

Asp Met Ser Cys Gly Glu Glu Ser Leu Ser Ser Fro Pro Ser Asp 200

Gln Glu Cys Thr Phe Phe Phe Asn Phe Lys Val Ala Gln Thr Leu Cys 210 215 220

Phe Pro Ser 225

<210> 120 <211> 101 <212> PRT

<213> Homo sapien

<400> 120

Met Cys Cys Trp Gln Ala Thr Phe Phe Lys Ala Leu Ser Glu Thr Leu 1 5 10

Ile Phe Gly Val Ser Phe Gln Glu Thr Phe Leu Trp Arg Glu Asn Glu 20 25 3.0

158

Tyr Glu Asp Asn Phe Gln Leu Ile Ile Trp Val Thr Gln Asn Arg Val

Tyr Gly Tyr Arg Ile Asp Phe Leu Ile Met Ala Ser Asp Val Ala Leu

Gly Lys Gly Ala Leu Cys Thr Val Cys Ala Cys Met Cys Val Tyr Leu

Tyr Lys Phe Val Ser Phe Gly Met Thr Val Cys Leu Ser Arg Lys Pro 90

Ile Asn Ser Lys Phe 100

<210> 121 <211> 392

<212> PRT

<213> Homo sapien

<400> 121

Arg Leu Ala Leu Cys Pro Gln Leu Ile Leu Pro His Val Asp

Ile Gln Leu Lys Tyr Phe Asp Leu Gly Leu Pro Asn Arg Asp Gln Thr 20

Asp Asp Gln Val Thr Ile Asp Ser Ala Leu Ala Thr Gln Lys Tyr Ser

Val Ala Val Lys Cys Ala Thr Ile Thr Pro Asp Glu Ala Arg Val Glu

Glu Phe Lys Leu Lys Lys Met Trp Lys Ser Pro Asn Gly Thr Ile Arg

Asn Ile Leu Gly Gly Thr Val Phe Arg Glu Pro Ile Ile Cys Lys Asn

Ile Pro Arg Leu Val Pro Gly Trp Thr Lys Pro Ile Thr Ile Gly Arg

His Ala His Gly Asp Gln Tyr Lys Ala Thr Asp Phe Val Ala Asp Arg 120

Ala Gly Thr Phe Lys Met Val Phe Thr Pro Lys Asp Gly Ser Gly Val 130 135

Lys Glu Trp Glu Val Tyr Asn Phe Pro Ala Gly Gly Val Gly Met Gly

Met Tyr Asn Thr Asp Glu Ser Ile Ser Gly Phe Ala His Ser Cys Phe 165 170

Gln Tyr Ala Ile Gln Lys Lys Trp Pro Leu Tyr Met Ser Thr Lys Asn 185

Thr Ile Leu Lys Ala Tyr Asp Gly Arg Phe Lys Asp Ile Phe Gln Glu 200 205

Ile Phe Asp Lys His Tyr Lys Thr Asp Phe Asp Lys Asn Lys Ile Trp

Tyr Glu His Arg Leu Ile Asp Asp Met Val Ala Gln Val Leu Lys Ser 235

Ser Gly Gly Phe Val Trp Ala Cys Lys Asn Tyr Asp Gly Asp Val Gln

Ser Asp Ile Leu Ala Gln Gly Phe Gly Ser Leu Gly Leu Met Thr Ser 265

Val Leu Val Cys Pro Asp Gly Lys Thr Ile Glu Ala Glu Ala Ala His 280 285

Gly Thr Val Thr Arg His Tyr Arg Glu His Gln Lys Gly Arg Pro Thr 295

Ser Thr Asn Pro Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu 305 315

His Arg Gly Lys Leu Asp Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln 325 335

Met Leu Glu Lys Val Cys Val Glu Thr Val Glu Ser Gly Ala Met Thr 345

Lys Asp Leu Ala Gly Cys Ile His Gly Leu Ser Asn Val Lys Leu Asn 365

Glu His Phe Leu Asn Thr Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn 375 380

Leu Asp Arg Ala Leu Gly Arg Gln 385

<210> 122

<211> 438 <212> PRT

<213> Homo sapien

<400> 122

Met Ala Cys Arg Leu Leu Ile Leu Pro Phe Val Val Met Ser Leu Ser

His Trp Gly Asp Ala Leu Leu Leu Ala Leu Cys Pro Gln Leu Ile Leu

Pro His Val Asp Ile Gln Leu Lys Tyr Phe Asp Leu Gly Leu Pro Asn

Arg Asp Gln Thr Asp Asp Gln Val Thr Ile Asp Ser Ala Leu Ala Thr 50

Gln Lys Tyr Ser Val Ala Val Lys Cys Ala Thr Ile Thr Pro Asp Glu 70

Ala Arg Val Glu Glu Phe Lys Leu Lys Lys Met Trp Lys Ser Pro Asn 85 90

Gly Thr Ile Arg Asn Ile Leu Gly Gly Thr Val Phe Arg Glu Pro Ile 100 105

Ile Cys Lys Asn Ile Pro Arg Leu Val Pro Gly Trp Thr Lys Pro Ile 120

Thr Ile Gly Arg His Ala His Gly Asp Gln Tyr Lys Ala Thr Asp Phe 130

Val Ala Asp Arg Ala Gly Thr Phe Lys Met Val Phe Thr Pro Lys Asp 150

Gly Ser Gly Val Lys Glu Trp Glu Val Tyr Asn Phe Pro Ala Gly Gly 170

Val Gly Met Gly Met Tyr Asn Thr Asp Glu Ser Ile Ser Gly Phe Ala 190

His Ser Cys Phe Gln Tyr Ala Ile Gln Lys Lys Trp Pro Leu Tyr Met

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200 205 195 Ser Thr Lys Asn Thr Ile Leu Lys Ala Tyr Asp Gly Arg Phe Lys Asp Ile Phe Gln Glu Ile Phe Asp Lys His Tyr Lys Thr Asp Phe Asp Lys 235 240 230 Asn Lys Ile Trp Tyr Glu His Arg Leu Ile Asp Asp Met Val Ala Gln 245 250 Val Leu Lys Ser Ser Gly Gly Phe Val Trp Ala Cys Lys Asn Tyr Asp Gly Asp Val Gln Ser Asp Ile Leu Ala Gln Gly Phe Gly Ser Leu Gly 280 Leu Met Thr Ser Val Leu Val Cys Pro Asp Gly Lys Thr Ile Glu Ala 295 Glu Ala Ala His Gly Thr Val Thr Arg His Tyr Arg Glu His Gln Lys 305 310 315 Gly Arg Pro Thr Ser Thr Asn Pro Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu His Arg Gly Lys Leu Asp Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln Met Leu Glu Lys Val Cys Val Glu Thr Val Glu Ser Gly Ala Met Thr Lys Asp Leu Ala Gly Cys Ile His Gly Leu Ser Asn 375 Val Lys Leu Asn Glu His Phe Leu Asn Thr Thr Asp Phe Leu Asp Thr 385 390 395 Ile Lys Ser Asn Leu Asp Ser Ser Pro Gly Gln Ala Val Gly Gly Ala Thr His Gly Cys Ser Gly Gly Ala Arg Ala Glu Pro Ala Gly Pro 420

Pro Glu Arg Gly Arg Gly
435

<210> 123 <211> 292 <212> PRT

<213> Homo sapien

<400> 123

Pro Gly His Pro Pro Thr Gly Ala Pro Arg Leu Ala Ile Leu Leu Ser 1 10 15

Leu Gln Tyr Lys Ala Thr Asp Phe Val Ala Asp Arg Ala Gly Thr Phe 20 25 30

Lys Met Val Phe Thr Pro Lys Asp Gly Ser Gly Val Lys Glu Trp Glu 35 40 45

Val Tyr Asn Phe Pro Ala Gly Gly Val Gly Met Gly Met Tyr Asn Thr 50 55 60

Asp Glu Ser Ile Ser Gly Phe Ala His Ser Cys Phe Gln Tyr Ala Ile 65 70 75 80

Gln Lys Lys Trp Pro Leu Tyr Met Ser Thr Lys Asn Thr Ile Leu Lys 85 90 95

Ala Tyr Asp Gly Arg Phe Lys Asp Ile Phe Gln Glu Ile Phe Asp Lys

His Tyr Lys Thr Asp Phe Asp Lys Asn Lys Ile Trp Tyr Glu His Arg

Leu Ile Asp Asp Met Val Ala Gln Val Leu Lys Ser Ser Gly Gly Phe 130 135 140

Val Trp Ala Cys Lys Asn Tyr Asp Gly Asp Val Gln Ser Asp Ile Leu 145 150 155 160

Ala Gln Gly Phe Gly Ser Leu Gly Leu Met Thr Ser Val Leu Val Cys
165 170 175

Pro Asp Gly Lys Thr Ile Glu Ala Glu Ala Ala His Gly Thr Val Thr 180 185 190

Arg His Tyr Arg Glu His Gln Lys Gly Arg Pro Thr Ser Thr Asn Pro

163

Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu His Arg Gly Lys

Leu Asp Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln Met Leu Glu Lys 240

Val Cys Val Glu Thr Val Glu Ser Gly Ala Met Thr Lys Asp Leu Ala 245

Gly Cys Ile His Gly Leu Ser Asn Val Lys Leu Asn Glu His Phe Leu 265

Asn Thr Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn Leu Asp Arg Ala 280

Leu Gly Arg Gln 290

<210> 124

<211> 417 <212> PRT <213> Homo sapien

<400> 124

Met Lys Asn Phe Arg Thr Pro Val Trp Leu Cys Cys Leu Gly Phe

Lys Phe Trp Leu Lys Asp Gly Gly Cys Ser Gly Thr Thr Ile Ile Ser

Val Leu Thr Glu Phe Lys Leu Lys Lys Met Trp Lys Ser Pro Asn Gly

Thr Ile Arg Asn Ile Leu Gly Gly Thr Val Phe Arg Glu Pro Ile Ile

Cys Lys Asn Ile Pro Arg Leu Val Pro Gly Trp Thr Lys Pro Ile Thr 70

Ile Gly Arg His Ala His Gly Asp Gln Val Gly Gln Gly Glu Gly

Ile His Arg Pro Gly His Pro Pro Thr Gly Ala Pro Arg Leu Ala Ile 100

Leu Leu Ser Leu Gln Tyr Lys Ala Thr Asp Phe Val Ala Asp Arg Ala 115

- Gly Thr Phe Lys Met Val Phe Thr Pro Lys Asp Gly Ser Gly Val Lys
- Glu Trp Glu Val Tyr Asn Phe Pro Ala Gly Gly Val Gly Met Gly Met
- Tyr Asn Thr Asp Glu Ser Ile Ser Gly Phe Ala His Ser Cys Phe Gln 170
- Tyr Ala Ile Gln Lys Lys Trp Pro Leu Tyr Met Ser Thr Lys Asn Thr
- Ile Leu Lys Ala Tyr Asp Gly Arg Phe Lys Asp Ile Phe Gln Glu Ile
- Phe Asp Lys His Tyr Lys Thr Asp Phe Asp Lys Asn Lys Ile Trp Tyr 210
- Glu His Arg Leu Ile Asp Asp Met Val Ala Gln Val Leu Lys Ser Ser 225 235
- Gly Gly Phe Val Trp Ala Cys Lys Asn Tyr Asp Gly Asp Val Gln Ser 245
- Asp Ile Leu Ala Gln Gly Phe Gly Ser Leu Gly Leu Met Thr Ser Val
- Leu Val Cys Pro Asp Gly Lys Thr Ile Glu Ala Glu Ala Ala His Gly 275
- Thr Val Thr Arg His Tyr Arg Glu His Gln Lys Gly Arg Pro Thr Ser 300
- Thr Asn Pro Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu His 305 320
- Arg Gly Lys Leu Asp Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln Met
- Leu Glu Lys Val Cys Val Glu Thr Val Glu Ser Gly Ala Met Thr Lys
- Asp Leu Ala Gly Cys Ile His Gly Leu Ser Asn Val Lys Leu Asn Glu

165

His Phe Leu Asn Thr Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn Leu 375

Asp Ser Ser Pro Gly Gln Ala Val Gly Gly Gly Ala Thr His Gly Cys 385

Ser Gly Gly Ala Arg Ala Glu Pro Ala Gly Pro Pro Glu Arg Gly Arg 405 410

Gly

<210> 125 <211> 255

<212> PRT

<213> Homo sapien

<400> 125

Lys Pro Thr Met Gly Val Ser Arg Thr Ser Ser Arg Arg Ser Leu Thr

Ser Lys Ala Ser Ser Met Tyr Ser Val Ala Phe Leu Pro Phe Pro Pro 25

Cys Cys Ser His Pro Thr Leu Gly Arg Ser Leu Leu Glu Cys Ile Trp 35

Leu Ser Ser Glu Ala Gln Gly Gly Ile Pro Asn Leu Ser Ala Phe Cys 50

Pro Leu Pro Ile Thr Asp Leu Phe Thr Pro Arg His Tyr Lys Thr Asp

Phe Asp Lys Asn Lys Ile Trp Tyr Glu His Arg Leu Ile Asp Asp Met

Val Ala Gln Val Leu Lys Ser Ser Gly Gly Phe Val Trp Ala Cys Lys 100 105

Asn Tyr Asp Gly Asp Val Gln Ser Asp Ile Leu Ala Gln Gly Phe Gly

Ser Leu Gly Leu Met Thr Ser Val Leu Val Cys Pro Asp Gly Lys Thr

Ile Glu Ala Glu Ala Ala His Gly Thr Val Thr Arg His Tyr Arg Glu

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166 155 145 150 160 His Gln Lys Gly Arg Pro Thr Ser Thr Asn Pro Ile Ala Ser Ile Phe 170 165 Ala Trp Thr Arg Gly Leu Glu His Arg Gly Lys Leu Asp Gly Asn Gln 185 Asp Leu Ile Arg Phe Ala Gln Met Leu Glu Lys Val Cys Val Glu Thr 205 195 200 Val Glu Ser Gly Ala Met Thr Lys Asp Leu Ala Gly Cys Ile His Gly 220 Leu Ser Asn Val Lys Leu Asn Glu His Phe Leu Asn Thr Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn Leu Asp Arg Ala Leu Gly Arg Gln 245 250 <210> 126 <211> 289 <212> PRT <213> Homo sapien <400> 126 Met Ser Thr Lys Asn Thr Ile Leu Lys Ala Tyr Asp Gly Arg Phe Lys 5 Asp Ile Phe Gln Glu Ile Phe Asp Asn Lys Ala Ser Ser Met Tyr Ser 20 Val Ala Phe Leu Pro Phe Pro Pro Cys Cys Ser His Pro Thr Leu Gly 40 35 Arg Ser Leu Leu Glu Cys Ile Trp Leu Ser Ser Glu Ala Gln Gly Gly 55 Ile Pro Asn Leu Ser Ala Phe Cys Pro Leu Pro Ile Thr Asp Leu Phe Thr Pro Arg His Tyr Lys Thr Asp Phe Asp Lys Asn Lys Ile Trp Tyr Glu His Arg Leu Ile Asp Asp Met Val Ala Gln Val Leu Lys Ser Ser

105

100

167

Gly Gly Phe Val Trp Ala Cys Lys Asn Tyr Asp Gly Asp Val Gln Ser 115

Asp Ile Leu Ala Gln Gly Phe Gly Ser Leu Gly Leu Met Thr Ser Val

Leu Val Cys Pro Asp Gly Lys Thr Ile Glu Ala Glu Ala Ala His Gly 145 150 155

Thr Val Thr Arg His Tyr Arg Glu His Gln Lys Gly Arg Pro Thr Ser 165 170

Thr Asn Pro Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu His 180 185

Arg Gly Lys Leu Asp Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln Met 195

Leu Glu Lys Val Cys Val Glu Thr Val Glu Ser Gly Ala Met Thr Lys 215

Asp Leu Ala Gly Cys Ile His Gly Leu Ser Asn Val Lys Leu Asn Glu 225

His Phe Leu Asn Thr Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn Leu 250

Asp Ser Ser Pro Gly Gln Ala Val Gly Gly Gly Ala Thr His Gly Cys

Ser Gly Gly Ala Arg Ala Glu Pro Ala Gly Pro Pro Glu Arg Gly Arg

Gly

<210> 127 <211> 167

<212> PRT

<213> Homo sapien

<400> 127

Val Glu Pro Arg Thr Met Ala Ala Thr Ile Leu Gly Cys Arg Gly Gln 15

Gln Gly Ser Ala Gly Trp Pro Gln Glu Arg Arg Gly Pro Glu Arg Lys

20

30

Ala Phe Tyr Pro Pro Gly Phe Gly Ser Leu Gly Leu Met Thr Ser Val

25

Leu Val Cys Pro Asp Gly Lys Thr Ile Glu Ala Glu Ala Ala His Gly 55

Thr Val Thr Arg His Tyr Arg Glu His Gln Lys Gly Arg Pro Thr Ser 70

Thr Asn Pro Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu His

Arg Gly Lys Leu Asp Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln Met 100 105

Leu Glu Lys Val Cys Val Glu Thr Val Glu Ser Gly Ala Met Thr Lys 120

Asp Leu Ala Gly Cys Ile His Gly Leu Ser Asn Val Lys Leu Asn Glu

His Phe Leu Asn Thr Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn Leu 150

Asp Arg Ala Leu Gly Arg Gln 165

<210> 128 <211> 188

<212> PRT

<213> Homo sapien

<400> 128

Met Ala Ala Thr Ile Leu Gly Cys Arg Gly Gln Gln Gly Ser Ala Gly

Trp Pro Gln Glu Arg Arg Gly Pro Glu Arg Lys Ala Phe Tyr Pro Pro 20

Gly Phe Gly Ser Leu Gly Leu Met Thr Ser Val Leu Val Cys Pro Asp

Gly Lys Thr Ile Glu Ala Glu Ala Ala His Gly Thr Val Thr Arg His 60

Tyr Arg Glu His Gln Lys Gly Arg Pro Thr Ser Thr Asn Pro Ile Ala 65 70 75 80

Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu His Arg Gly Lys Leu Asp 85 90 95

Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln Met Leu Glu Lys Val Cys
100 105 110

Val Glu Thr Val Glu Ser Gly Ala Met Thr Lys Asp Leu Ala Gly Cys 115 120 125

Ile His Gly Leu Ser Asn Val Lys Leu Asn Glu His Phe Leu Asn Thr 130 135 140

Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn Leu Asp Ser Ser Pro Gly 145 150 155 160

Gln Ala Val Gly Gly Gly Ala Thr His Gly Cys Ser Gly Gly Ala Arg 165 . 170 175

Ala Glu Pro Ala Gly Pro Pro Glu Arg Gly Arg Gly 180 185

<210> 129

<211> 162

<212> PRT

<213> Homo sapien

<400> 129

Pro Ala Arg Pro Ala Pro Ala Arg Pro Ser Val Ser Val Ser Pro Arg

1 10 15

Pro Gly Ser Arg Glu Glu Arg Arg Ala Leu Gly Pro Leu Pro Pro Cys 20 25 30

Ser Phe Ala Leu Gln Leu Gly Met Ala Gly Tyr Leu Arg Val Val Arg 35 40 45

Ser Leu Cys Arg Ala Ser Gly Ser Arg Pro Ala Trp Ala Pro Ala Ala 50 55 60

Leu Thr Ala Pro Thr Ser Gln Glu Gln Pro Arg Arg His Tyr Ala Asp
65 70 75 80

Lys Arg Ile Lys Val Ala Lys Pro Val Val Glu Met Asp Gly Asp Glu

85 90

95

Met Thr Arg Ile Ile Trp Gln Phe Ile Lys Glu Lys Cys Glu Ala Glu 100 105

Arg Ala Leu Pro Glu His His Gly Leu Pro Arg His His Gln Glu Gln 120

Pro Gly Gln Ser Pro Gly Gln Ala Val Gly Gly Gly Ala Thr His Gly

Cys Ser Gly Gly Ala Arg Ala Glu Pro Ala Gly Pro Pro Glu Arg Gly 155

Arg Gly

<210> 130 <211> 112 <212> PRT

<213> Homo sapien

<400> 130

Met Ala Gly Tyr Leu Arg Val Val Arg Ser Leu Cys Arg Ala Ser Gly 5 10

Ser Arg Pro Ala Trp Ala Pro Ala Ala Leu Thr Ala Pro Thr Ser Gln 20 25

Glu Gln Pro Arg Arg His Tyr Ala Asp Lys Arg Ile Lys Val Ala Lys

Pro Val Val Glu Met Asp Gly Asp Glu Met Thr Arg Ile Ile Trp Gln 50

Phe Ile Lys Glu Lys Cys Glu Ala Glu Arg Ala Leu Pro Glu His His 70

Gly Leu Pro Arg His His Gln Glu Gln Pro Gly Gln Gln Pro Trp Ala

Gly Ser Arg Gly Arg Arg His Pro Trp Leu Gln Trp Arg Gly Gln Gly 100 105 110

<210> 131

<211> 306 <212> PRT

<213> Homo sapien

<400> 131

Thr Phe Trp His Arg Lys Lys Gly Ile Ala Thr Leu His Arg Cys Phe 1 5 10 15

Gly Asn Pro Leu Tyr Cys Glu Val Leu Cys Gln Asp Leu Leu Ser Lys 20 25 30

Asp Val Leu Leu Phe His Val Leu Gln Lys Glu Glu Glu Glu Asn Ser 35 40 45

Lys Trp Glu Thr Leu Ser Ala Asn Ala Met Lys Ser Ile Met Tyr Ser 50 55 60

Ile Ser Pro Ala Asn Ser Glu Glu Gly Gln Glu Leu Tyr Val Cys Thr 65 70 75 80

Val Lys Asp Asp Val Asn Leu Asp Thr Val Leu Leu Pro Phe Leu 85 90 95

Lys Glu Ile Ala Val Ser Gln Leu Asp Gln Leu Ser Pro Glu Glu Gln
100 105 110

Leu Leu Val Lys Cys Ala Ala Ile Ile Gly His Ser Phe His Ile Asp 115 120 125

Leu Leu Gln His Leu Leu Pro Gly Trp Asp Lys Asn Lys Leu Leu Gln 130 135 140

Val Leu Arg Ala Leu Val Asp Ile His Val Leu Cys Trp Ser Asp Lys
145 150 155 160

Ser Gln Glu Leu Pro Ala Glu Pro Ile Leu Met Pro Ser Ser Ile Asp 165 170 175

Ile Ile Asp Gly Thr Lys Glu Lys Lys Thr Lys Leu Asp Gly Gly Ser 180 185 190

Ala Ser Leu Leu Arg Leu Gln Glu Glu Leu Ser Leu Pro Gln Thr Glu 195 200 205

. Val Leu Glu Phe Gly Val Pro Leu Leu Arg Ala Ala Trp Glu Leu 210 215 220

Trp Pro Lys Glu Gln Gln Ile Ala Leu His Leu Glu Cys Ala Cys Phe

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225 230 235 240

Leu Gln Val Leu Ala Cys Arg Cys Gly Ser Cys His Gly Gly Asp Phe 245 250 255

Val Pro Phe His His Phe Ala Val Cys Ser Thr Lys Asn Ser Lys Gly 260 265 270

Thr Ser Arg Phe Cys Thr Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln 275 280 285

Val Ile Thr Glu Lys Leu Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys 290 295 300

Ser Ser 305

<210> 132

<211> 508

<212> PRT

<213> Homo sapien

<400> 132

Met Pro Trp Arg Ala Pro Ser Ala Ser Ser Ala Ser Ala Gly Arg Ile 1 5 10 15

Leu Leu Arg Pro Thr Glu Glu Glu Gly Gly Ala Glu Arg Ser Phe Ser 20 25 30

Gly Pro Arg Gly Ser Ser Gly Arg Ile Pro Arg Phe Val Ser Ile Ser 35 40 45

Ile Thr Asn Gly Pro Val Phe Cys Gly Val Val Gly Ala Val Ala Arg 50 55 60

His Glu Tyr Thr Val Ile Gly Pro Lys Val Ser Leu Ala Ala Arg Met 65 70 75 80

Ile Thr Ala Tyr Pro Gly Leu Val Ser Cys Asp Glu Val Thr Tyr Leu 85 90 95

Arg Ser Met Leu Pro Ala Tyr Asn Phe Lys Lys Leu Pro Glu Lys Met

Met Lys Asn Ile Ser Asn Pro Gly Lys Ile Tyr Glu Tyr Leu Gly His 115 120 125

- Arg Arg Cys Ile Met Phe Gly Lys Arg His Leu Ala Arg Lys Arg Asn 130 135 140
- Lys Asn His Pro Leu Gly Val Leu Gly Ala Pro Cys Leu Ser Thr 145 150 155 160
- Asp Trp Glu Lys Glu Leu Glu Ala Phe Gln Met Ala Gln Gln Gly Cys 165 170 175
- Leu His Gln Lys Lys Gly Gln Ala Val Leu Tyr Glu Gly Gly Lys Gly 180 185 190
- Tyr Gly Lys Ser Gln Leu Leu Ala Glu Ile Asn Phe Leu Ala Gln Lys 195 200 205
- Glu Gly His Ser Tyr Pro Ser Gln Val Leu Trp Lys Pro Thr Leu Phe 210 215 220
- Glu Val Leu Cys Gln Asp Leu Leu Ser Lys Asp Val Leu Leu Phe His 225 230 235 240
- Val Leu Gln Lys Glu Glu Glu Glu Asn Ser Lys Trp Glu Thr Leu Ser 245 250 255
- Ala Asn Ala Met Lys Ser Ile Met Tyr Ser Ile Ser Pro Ala Asn Ser 260 265 270
- Glu Glu Gly Gln Glu Leu Tyr Val Cys Thr Val Lys Asp Asp Val Asn 275 280 285
- Leu Asp Thr Val Leu Leu Leu Pro Phe Leu Lys Glu Ile Ala Val Ser 290 295 300
- Gln Leu Asp Gln Leu Ser Pro Glu Glu Gln Leu Leu Val Lys Cys Ala 305 310 315 320
- Ala Ile Ile Gly His Ser Phe His Ile Asp Leu Leu Gln His Leu Leu 325 330 335
- Pro Gly Trp Asp Lys Asn Lys Leu Leu Gln Val Leu Arg Ala Leu Val 340 345 350
- Asp Ile His Val Leu Cys Trp Ser Asp Lys Ser Gln Glu Leu Pro Ala 355 360 365

174

Glu Pro Ile Leu Met Pro Ser Ser Ile Asp Ile Ile Asp Gly Thr Lys 370 375

Glu Lys Lys Thr Lys Leu Asp Gly Gly Ser Ala Ser Leu Leu Arg Leu

Gln Glu Glu Leu Ser Leu Pro Gln Thr Glu Val Leu Glu Phe Gly Val 405 410

Pro Leu Leu Arg Ala Ala Ala Trp Glu Leu Trp Pro Lys Glu Gln Gln

Ile Ala Leu His Leu Glu Cys Ala Cys Phe Leu Gln Val Leu Ala Cys

Arg Cys Gly Ser Cys His Gly Gly Asp Phe Val Pro Phe His His Phe 455

Ala Val Cys Ser Thr Lys Asn Ser Lys Gly Thr Ser Arg Phe Cys Thr 470

Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln Val Ile Thr Glu Lys Leu 485 490

Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys Ser Ser 505

<210> 133

<211> 306

<212> PRT <213> Homo sapien

<400> 133

Thr Phe Trp His Arg Lys Lys Gly Ile Ala Thr Leu His Arg Cys Phe

Gly Asn Pro Leu Tyr Cys Glu Val Leu Cys Gln Asp Leu Leu Ser Lys

Asp Val Leu Leu Phe His Val Leu Gln Lys Glu Glu Glu Asn Ser 35 40

Lys Trp Glu Thr Leu Ser Ala Asn Ala Met Lys Ser Ile Met Tyr Ser 50 55

Ile Ser Pro Ala Asn Ser Glu Glu Gly Gln Glu Leu Tyr Val Cys Thr 70 75

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Val	Lys	Asp	Asp	Val	Asn	Leu	Asp	Thr	Val	Leu	Leu	Leu	Pro	Phe	Leu
				85					90					95	

- Lys Glu Ile Ala Val Ser Gln Leu Asp Gln Leu Ser Pro Glu Glu Gln
 100 105 110
- Leu Leu Val Lys Cys Ala Ala Ile Ile Gly His Ser Phe His Ile Asp 115 120 125
- Leu Leu Gln His Leu Leu Pro Gly Trp Asp Lys Asn Lys Leu Leu Gln 130 135 140
- Val Leu Arg Ala Leu Val Asp Ile His Val Leu Cys Trp Ser Asp Lys 145 150 155 160
- Ser Gln Glu Leu Pro Ala Glu Pro Ile Leu Met Pro Ser Ser Ile Asp 165 170 175
- Ile Ile Asp Gly Thr Lys Glu Lys Lys Thr Lys Leu Asp Gly Gly Ser 180 185 190
- Ala Ser Leu Leu Arg Leu Gln Glu Glu Leu Ser Leu Pro Gln Thr Glu
 195 200 205
- Val Leu Glu Phe Gly Val Pro Leu Leu Arg Ala Ala Trp Glu Leu 210 225 220
- Trp Pro Lys Glu Gln Gln Ile Ala Leu His Leu Glu Cys Ala Cys Phe 225 230 235 240
- Leu Gln Val Leu Ala Cys Arg Cys Gly Ser Cys His Gly Gly Asp Phe 245 250 255
- Val Pro Phe His His Phe Ala Val Cys Ser Thr Lys Asn Ser Lys Gly 260 265 270
- Thr Ser Arg Phe Cys Thr Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln 275 280 285
- Val Ile Thr Glu Lys Leu Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys 290 295 300

Ser Ser 305

176

<210> 134

<211> 429

<212> PRT

<213> Homo sapien

<400> 134

Met Ile Thr Ala Tyr Pro Gly Leu Val Ser Cys Asp Glu Val Thr Tyr

Leu Arg Ser Met Leu Pro Ala Tyr Asn Phe Lys Lys Leu Pro Glu Lys

Met Met Lys Asn Ile Ser Asn Pro Gly Lys Ile Tyr Glu Tyr Leu Gly

His Arg Arg Cys Ile Met Phe Gly Lys Arg His Leu Ala Arg Lys Arg

Asn Lys Asn His Pro Leu Leu Gly Val Leu Gly Ala Pro Cys Leu Ser

Thr Asp Trp Glu Lys Glu Leu Glu Ala Phe Gln Met Ala Gln Gln Gly

Cys Leu His Gln Lys Lys Gly Gln Ala Val Leu Tyr Glu Gly Gly Lys 100 105

Gly Tyr Gly Lys Ser Gln Leu Leu Ala Glu Ile Asn Phe Leu Ala Gln 115

Lys Glu Gly His Ser Tyr Pro Ser Gln Val Leu Trp Lys Pro Thr Leu 130

Phe Glu Val Leu Cys Gln Asp Leu Leu Ser Lys Asp Val Leu Leu Phe 145 150 160

His Val Leu Gln Lys Glu Glu Glu Glu Asn Ser Lys Trp Glu Thr Leu

Ser Ala Asn Ala Met Lys Ser Ile Met Tyr Ser Ile Ser Pro Ala Asn 180 185

Ser Glu Glu Gly Gln Glu Leu Tyr Val Cys Thr Val Lys Asp Asp Val 200

Asn Leu Asp Thr Val Leu Leu Leu Pro Phe Leu Lys Glu Ile Ala Val

210 215 220

Ser Gln Leu Asp Gln Leu Ser Pro Glu Glu Gln Leu Leu Val Lys Cys

Ala Ala Ile Ile Gly His Ser Phe His Ile Asp Leu Leu Gln His Leu 250

Leu Pro Gly Trp Asp Lys Asn Lys Leu Leu Gln Val Leu Arg Ala Leu 260 265

Val Asp Ile His Val Leu Cys Trp Ser Asp Lys Ser Gln Glu Leu Pro 280

Ala Glu Pro Ile Leu Met Pro Ser Ser Ile Asp Ile Ile Asp Gly Thr 290 295

Lys Glu Lys Lys Thr Lys Leu Asp Gly Gly Ser Ala Ser Leu Leu Arg 305 315

Leu Gln Glu Glu Leu Ser Leu Pro Gln Thr Glu Val Leu Glu Phe Gly 330

Val Pro Leu Leu Arg Ala Ala Ala Trp Glu Leu Trp Pro Lys Glu Gln 340 345

Gln Ile Ala Leu His Leu Glu Cys Ala Cys Phe Leu Gln Val Leu Ala 360

Cys Arg Cys Gly Ser Cys His Gly Gly Asp Phe Val Pro Phe His His

Phe Ala Val Cys Ser Thr Lys Asn Ser Lys Gly Thr Ser Arg Phe Cys 395

Thr Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln Val Ile Thr Glu Lys 410

Leu Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys Ser Ser 420 425

<210> 135 <211> 306 <212> PRT <213> Homo sapien

<400> 135

	Thr 1	Phe	Trp	His	Arg 5	ГÀв	Lys	Gly	Ile	Ala 10	Thr	Leu	His	Arg	Сув 15	Phe
(Gly	Asn	Pro	Leu 20	Tyr	Сув	Glu	Val	Leu 25	Сув	Gln	Asp	Leu	Leu 30	Ser	Lys
2	Asp	Val	Leu 35	Leu	Phe	His	Val	Leu 40	Gln	Lys	Glu	Glu	Glu 45	Glu	Asn	Ser
1	гуs	Trp 50	Glu	Thr	Leu	Ser	Ala 55	Asn	Ala	Met	Lys	Ser 60	Ile	Met	Tyr	Ser
	Ile 55	Ser	Pro	Ala	Asn	Ser 70	Glu	Glu	Gly	Gln	Glu 75	Leu	Tyr	Val	Сув	Thr 80
7	Val	Lys	Asp	Asp	Val 85	Asn	Leu	Asp	Thr	Val 90	Leu	Leu	Leu	Pro	Phe 95	Leu
I	pys	Glu	Ile	Ala 100	Val	Ser	Gln	Leu	Asp 105	Gln	Leu	Ser	Pro	Glu 110	Glu	Gln
I	Geu	Leu	Val 115	ГÀв	Сув	Ala	Ala	Ile 120	Ile	Gly	His	Ser	Phe 125	His	Ile	Asp
Ι		Leu 130	Gln	His	Leu	Leu	Pro 135	Gly	Trp	qaA	Lys	Asn 140	Lув	Leu	Leu	Gln
	/al 45	Leu	Arg	Ala	Leu	Val 150	Asp	Ile	His	Val	Leu 155	Cys	Trp	Ser	Asp	Lys 160
5	Ser	Gln	Glµ	Leu	Pro 165	Ala	Glu	Pro	Ile	Leu 170	Met	Pro	Ser	Ser	Ile 175	Asp
1	le	Ile	Asp	Gly 180	Thr	Lys	Glu	Lys	Lys 185	Thr	ГХв	Leu	Asp	Gly 190	Gly	Ser
P	Mla	Ser	Leu 195	Leu	Arg	Leu	Gln	Glu 200	Glu	Leu	Ser	Leu	Pro 205	Gln	Thr	Glu
V	al	Leu	Glu	Phe	Gly	Val	Pro	Leu	Leu	Arg	Ala	Ala	Ala	Trp	Glu	Leu

215

Trp Pro Lys Glu Gln Gln Ile Ala Leu His Leu Glu Cys Ala Cys Phe 225 230 235 240

220

210

179

Leu Gln Val Leu Ala Cys Arg Cys Gly Ser Cys His Gly Gly Asp Phe 245

Val Pro Phe His His Phe Ala Val Cys Ser Thr Lys Asn Ser Lys Gly 265

Thr Ser Arg Phe Cys Thr Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln

Val Ile Thr Glu Lys Leu Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys 295 300

Ser Ser 305

<210> 136 <211> 306 <212> PRT <213> Homo sapien

<400> 136

Thr Phe Trp His Arg Lys Lys Gly Ile Ala Thr Leu His Arg Cys Phe

Gly Asn Pro Leu Tyr Cys Glu Val Leu Cys Gln Asp Leu Leu Ser Lys

Asp Val Leu Leu Phe His Val Leu Gln Lys Glu Glu Glu Glu Asn Ser

Lys Trp Glu Thr Leu Ser Ala Asn Ala Met Lys Ser Ile Met Tyr Ser

Ile Ser Pro Ala Asn Ser Glu Glu Gly Gln Glu Leu Tyr Val Cys Thr

Val Lys Asp Asp Val Asn Leu Asp Thr Val Leu Leu Pro Phe Leu

Lys Glu Ile Ala Val Ser Gln Leu Asp Gln Leu Ser Pro Glu Glu Gln

Leu Leu Val Lys Cys Ala Ala Ile Ile Gly His Ser Phe His Ile Asp 120

Leu Leu Gln His Leu Leu Pro Gly Trp Asp Lys Asn Lys Leu Leu Gln 130 135

Val Leu Arg Ala Leu Val Asp Ile His Val Leu Cys Trp Ser Asp Lys 150 155 Ser Gln Glu Leu Pro Ala Glu Pro Ile Leu Met Pro Ser Ser Ile Asp 170 Ile Ile Asp Gly Thr Lys Glu Lys Lys Thr Lys Leu Asp Gly Gly Ser Ala Ser Leu Leu Arg Leu Gln Glu Glu Leu Ser Leu Pro Gln Thr Glu 200 Val Leu Glu Phe Gly Val Pro Leu Leu Arg Ala Ala Ala Trp Glu Leu Trp Pro Lys Glu Gln Gln Ile Ala Leu His Leu Glu Cys Ala Cys Phe Leu Gln Val Leu Ala Cys Arg Cys Gly Ser Cys His Gly Gly Asp Phe 250 Val Pro Phe His His Phe Ala Val Cys Ser Thr Lys Asn Ser Lys Gly Thr Ser Arg Phe Cys Thr Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln 275 280 Val Ile Thr Glu Lys Leu Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys 290 295 Ser Ser 305 <210> 137 <211> 306 <212> PRT <213> Homo sapien Thr Phe Trp His Arg Lys Lys Gly Ile Ala Thr Leu His Arg Cys Phe 5

Gly Asn Pro Leu Tyr Cys Glu Val Leu Cys Gln Asp Leu Leu Ser Lys

25

20

181

Asp Val Leu Leu Phe His Val Leu Gln Lys Glu Glu Glu Glu Asn Ser 35 40 45

Lys Trp Glu Thr Leu Ser Ala Asn Ala Met Lys Ser Ile Met Tyr Ser 50 55 60

Ile Ser Pro Ala Asn Ser Glu Glu Gly Gln Glu Leu Tyr Val Cys Thr 65 70 75 80

Val Lys Asp Asp Val Asn Leu Asp Thr Val Leu Leu Leu Pro Phe Leu 85 90 95

Lys Glu Ile Ala Val Ser Gln Leu Asp Gln Leu Ser Pro Glu Glu Gln 100 105 110

Leu Leu Val Lys Cys Ala Ala Ile Ile Gly His Ser Phe His Ile Asp 115 120 125

Leu Leu Gln His Leu Leu Pro Gly Trp Asp Lys Asn Lys Leu Leu Gln 130 135 140

Val Leu Arg Ala Leu Val Asp Ile His Val Leu Cys Trp Ser Asp Lys 145 150 155 160

Ser Gln Glu Leu Pro Ala Glu Pro Ile Leu Met Pro Ser Ser Ile Asp 165 170 175

Ile Ile Asp Gly Thr Lys Glu Lys Lys Thr Lys Leu Asp Gly Gly Ser 180 185 190

Ala Ser Leu Leu Arg Leu Gln Glu Glu Leu Ser Leu Pro Gln Thr Glu 195 200 205

Val Leu Glu Phe Gly Val Pro Leu Leu Arg Ala Ala Ala Trp Glu Leu 210 215 220

Trp Pro Lys Glu Gln Gln Ile Ala Leu His Leu Glu Cys Ala Cys Phe 225 230 235 240

Leu Gln Val Leu Ala Cys Arg Cys Gly Ser Cys His Gly Gly Asp Phe 245 250 255

Val Pro Phe His His Phe Ala Val Cys Ser Thr Lys Asn Ser Lys Gly
260 265 270

Thr Ser Arg Phe Cys Thr Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln

182

275 280 285

Val Ile Thr Glu Lys Leu Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys 290 295 300

Ser Ser

<210> 138

<211> 306

<212> PRT

<213> Homo sapien

<400> 138

Thr Phe Trp His Arg Lys Clys Gly Ile Ala Thr Leu His Arg Cys Phe 1 5 10 15

Gly Asn Pro Leu Tyr Cys Glu Val Leu Cys Gln Asp Leu Leu Ser Lys 20 25 30

Asp Val Leu Leu Phe His Val Leu Gln Lys Glu Glu Glu Glu Asn Ser 35 40 45

Lys Trp Glu Thr Leu Ser Ala Asn Ala Met Lys Ser Ile Met Tyr Ser 50 55

Ile Ser Pro Ala Asn Ser Glu Glu Gly Gln Glu Leu Tyr Val Cys Thr 65 70 75 80

Val Lys Asp Asp Val Asn Leu Asp Thr Val Leu Leu Leu Pro Phe Leu 85 90 95

Lys Glu Ile Ala Val Ser Gln Leu Asp Gln Leu Ser Pro Glu Glu Gln
100 105 110

Leu Leu Val Lys Cys Ala Ala Ile Ile Gly His Ser Phe His Ile Asp 115 120 125

Leu Leu Gln His Leu Leu Pro Gly Trp Asp Lys Asn Lys Leu Leu Gln 130 135 140

Val Leu Arg Ala Leu Val Asp Ile His Val Leu Cys Trp Ser Asp Lys 145 150 155 160

Ser Gln Glu Leu Pro Ala Glu Pro Ile Leu Met Pro Ser Ser Ile Asp 165 170 175

Ile Ile Asp Gly Thr Lys Glu Lys Lys Thr Lys Leu Asp Gly Gly Ser 185

Ala Ser Leu Leu Arg Leu Gln Glu Glu Leu Ser Leu Pro Gln Thr Glu

Val Leu Glu Phe Gly Val Pro Leu Leu Arg Ala Ala Trp Glu Leu 210 215

Trp Pro Lys Glu Gln Gln Ile Ala Leu His Leu Glu Cys Ala Cys Phe 225

Leu Gln Val Leu Ala Cys Arg Cys Gly Ser Cys His Gly Gly Asp Phe

Val Pro Phe His His Phe Ala Val Cys Ser Thr Lys Asn Ser Lys Gly 260 265

Thr Ser Arg Phe Cys Thr Tyr Arg Asp Thr Gly Ser Val Leu Thr Gln

Val Ile Thr Glu Lys Leu Gln Leu Pro Ser Pro Gln Glu Gln Arg Lys 290 295

Ser Ser 305

<210> 139 <211> 121 <212> PRT <213> Homo sapien

<400> 139

Met Arg Ser Thr Arg Glu Arg Arg Pro Gln Glu Arg Arg Arg Gln Gly

Ser Val Arg Gln Gly Arg Thr Gly Gly Ser Arg Phe Ala Ile Ile Pro

Gly Ser Arg Leu Cys Phe Val Gly Pro Ser His Cys Ile Leu Ala His 40

Thr Gly Glu Phe Trp Pro Trp Glu Asn Trp Ser Gln His Ala Ala Lys

Leu Ser His Gly Arg Gln Arg Ile Pro Thr His Cys Arg Ser Lys Pro

70 75 80 65

Cys Trp Lys Lys Gln Asn Ser Ser Pro Ser Val Glu Leu Arg Gly Asp 85 90

Trp Ser Arg Ala Pro Ala Asp Thr Lys Ile Gln Val Ala Gln Val Ser

His Arg Lys Trp Arg Ser Ile Cys Thr 115 120

<210> 140

<211> 125

<212> PRT <213> Homo sapien

<400> 140

Glu Phe Gly Gly Val Gly Ser Lys Leu Asn Thr Ala Ala Val His Gly

Arg Asn Tyr Ser Ile His Thr Phe Ser Glu Tyr Pro Ile Thr Lys Ala

Lys Lys Asn Thr Lys Gly Phe Val Leu Leu Gly Val Asp Leu Ile 35 40

Pro Arg Gln Ser Ser Gly His Arg His Arg Gly Cys Ala Gln Ala Cys 50 55

Pro Gln Pro Tyr Ala Ala Val Glu Ser Gly Arg Leu Leu Gln Asp Cys 65

Trp Pro Ser Pro Arg Met Ser Ala Ser Phe Ser Ile Tyr Trp Leu Leu 85

Leu Leu Tyr Val Met Leu Thr Leu Leu Leu Asn Thr Gly Leu Phe Ala

Phe Phe Pro Leu Met Glu Thr Trp Glu Arg His Tyr Phe 120 115

<210> 141

<211> 764

<212> PRT

<213> Homo sapien

<400> 141

185

Met Gln Ser Ser Leu Tyr Phe Glu Arg Ile Lys Tyr Asp Leu Gln Lys 1 10 15

Leu His Gly Gly Leu Ser Lys Thr Leu Asn Tyr Leu Phe Phe Val Glu
20 25 30

Lys Ser Tyr Phe Arg His His Phe Ile Pro Gln Gln Leu Ala Val Lys 35 40 45

Pro Leu Leu Cys Cys Met Pro Val Thr Leu Leu Asp Cys Gly Asp Tyr 50 55 60

Gln Cys Ser Arg Leu Leu Arg Ala Arg Val Gly Trp Gly Ile Lys Thr 65 70 75 80

Gly Lys Gln Ile Ala Thr Ile Leu Tyr Cys Glu Cys Leu Cys Trp Arg 85 90 95

Lys Tyr Arg Glu Leu Leu Glu His Leu Arg Gly Ala Pro Thr Leu Asn 100 105 110

Leu Gly Val Ser Arg Gly Ile Leu Lys Lys Val Lys Ala Lys Pro Gln 115 120 125

Ser Ile Ser Ser Leu Gly Ile Glu Gln Asn Val Arg Gly Glu Glu Met 130 135 140

Pro Lys Ala Arg Arg Glu Glu Tyr Ser Lys Gln Glu Gly Phe Gln Arg 145 150 155 160

Glu Lys Ser Ile Pro Asn Asn Ile Cys Thr Asn Leu Met Gly Arg Glu 165 170 175

Asn Val Gly Trp Gly Trp Met Met Arg Leu Lys Lys Lys Ala Arg Ser 180 185 190

Glu Ile Ile Ser Gly Leu Val His His Val Lys Glu Cys Arg Leu Asp 195 200 205

Ser Val Val Asn Arg Lys Ala Ala Gln Phe Ile Met Asn Ile Leu Glu 210 215 220

Asp Ser His Trp Asn Met Glu Asn Lys Val Gly Asp Asp Tyr Ile Leu 225 230 235 240

Glu Ala Gly Arg Thr Phe Leu Arg Lys Leu His Tyr Phe Gly Glu Asn

186

245 250 255

Asp Gly His Lys His Glu Glu Leu Glu Val Ile Met Thr Ser Ser Leu 260 265 270

Ile Phe Gln Lys Gly Phe Gly Arg Tyr Asn Ile Gly Thr Leu Thr Gly 275 280 285

Leu Thr Lys Gly Asp Glu Ile His His Ile Asn Cys Gln Thr Gln Gly 290 295 300

Gln Met Ser Asn Tyr Phe Ala Tyr Asp Val Glu Ile Thr Asn Phe Ser 305 310 315 320

Ser Gly Asn Gln Lys Leu Gln Asn Leu Val Phe Pro Ser Pro Arg Ile 325 330 335

Leu Ser Val Gln Thr Ile Cys Thr Thr Pro Pro Ile Ser Leu Pro Leu 340 345 350

His Val Cys Pro Thr Ser Lys Ser Arg Ser Ile His Thr Gly Lys Thr 355 360 365

Arg Ala Val Gln Val Ser Glu Asn Glu Lys Glu Glu Leu Ser Cys Ala 370 375 380

Glu Pro Ile Gln Asn Lys His Ile Leu Cys Ile Asp Ser Trp Asn Leu 385 390 395 400

Glu Arg Asn Ser Pro Asn Ser Ile Gly Ile Trp Met Val Cys Asn Pro 405 410 415

Trp Leu Gly Ser Ala Phe Lys Lys Pro Tyr Leu Glu Ile Pro Ser Met 420 425 430

Glu Pro Ser Ser Ile Lys Ala His Leu Lys Ala Tyr Ile Lys Asn Lys 435 440 445

Ile Leu Ala Ala Leu Tyr Thr Asn Asn Asp Val Met Ile Lys Leu Ser 450 455 460

Asp Ala Ile Ile Lys Trp Asn Tyr Lys Met Val Tyr Pro Leu Gln Lys 465 470 475 480

Lys Lys Ala Lys Phe Ser Val Glu His Cys Asp Phe Met Ser Leu His
485 490 495

- Ser Leu Gly Ala Glu Glu Gly Ala Leu Val Ser Ser Glu Val Glu Glu 505 Lys Thr Trp Arg Leu Ile Ile Tyr Ala Met Phe Phe His Leu Lys Glu Ala Phe Phe Leu Asp Tyr Leu Ile Gln Phe Pro Ser Arg Lys Leu Leu Val Pro Leu Thr Arg Gln Gln Leu Gly Arg Gln Lys Leu Tyr Cys Met 555 Tyr Met Val Ala Val Gly Arg Arg Phe Leu Ser Pro Gly Pro His Trp Pro Tyr Thr Ser Pro Leu Leu Val Met Pro Gly His Arg Pro Pro Val Ala Ile Ile Ser Tyr Leu Ser Leu Trp Leu Val Asn Leu Ser Ile Leu Ser Ala Ser Ala Leu Gln Ser Ala Gly Thr Leu Leu Thr Ser Ile Ser 610 Cys Trp Leu Ser Thr Phe Leu Ile Gly Pro Ala Leu Phe Ser Ser Gly 625 630 635 Pro Ala Val Glu Ser Pro Cys Pro Phe Arg Arg Ala Met Ala Tyr His 650 Cys Leu Leu Ser Leu His Ser Ala Ala Thr Thr Leu Asn Pro Ser Phe 660 665
- Ser Lys Asp Val Ala Asp Phe Thr Gly Lys His Lys Arg Leu Asp Leu 675
- Pro Gly Leu Pro Phe Thr Cys Leu Asn Leu Thr Ser Phe Asn Phe Gln 690
- Ser Gln Asn Val Gly Ile Val Ser Ser Leu Pro Tyr Ile Phe Leu Leu 715
- Leu Asn His Glu Ser Leu Ser Leu Pro Leu Ala Met Cys Trp Arg Leu 725 730

Leu Ser Gly Phe Arg Met Ser Ser His Leu Val Leu Val Ala Phe Asp 740 745 750

Ala Ser Ser Pro Pro Phe Lys Asp Thr Phe Glu Ile 755 760

<210> 142

<211> 267

<212> PRT

<213> Homo sapien

<400> 142

Val Arg Ala Pro Ser Pro Gly Gln Ala Gly Arg Ala Glu Gly Ala Asp 1 5 10 15

Pro Gln Pro Gly Pro Ala His Leu His Asp Gly Ser Glu Leu Leu Arg
20 25 30

Gly Lys Leu Arg Gln Leu Ser Glu Asp Asn Val Arg Pro Arg Gly Ala 35 40 45

Arg Leu Ser Ser Gly Pro Gly Thr Gly Val Ser Val Leu Phe Glu Arg 50 55 60

Asp Gly Glu Leu His Phe Pro Ala Cys His Arg Ala Leu Arg Ala Cys 65 70 75 80

Asp Gly Lys Ser Ser Ser Gln Pro Asn Val Ile Ser Ala Ala Leu Leu 85 90 95

Gly Pro Arg Ser Val Val Val Ser Gly Gly Leu Val Trp Arg Pro Val
100 105 110

Ser Gly Phe Gly Asp Gly Ser Asp Ala Ile Thr Ala Arg Gln Gly Val 115 120 125

Ser Arg Gly Val Lys Ala Ala Met Asn Arg Val Leu Cys Ala Pro Ala 130 135 140

Ala Gly Ala Val Arg Ala Leu Arg Leu Ile Gly Trp Ala Ser Arg Ser 145 150 155 160

Leu His Pro Leu Pro Gly Ser Arg Asp Arg Ala His Pro Ala Ala Glu 165 170 175

Glu Glu Asp Asp Pro Asp Arg Pro Ile Glu Phe Ser Ser Lys Ala

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189

180 185 190

Asn Pro His Arg Trp Ser Val Gly His Thr Met Gly Lys Gly His Gln

Arg Pro Trp Trp Lys Val Leu Pro Leu Ser Cys Phe Leu Val Ala Leu 210 215

Ile Ile Trp Cys Tyr Leu Arg Glu Glu Ser Glu Ala Asp Gln Trp Leu 235

Arg Gln Val Trp Gly Glu Val Pro Glu Pro Ser Asp Arg Ser Glu Glu 250

Pro Glu Thr Pro Ala Ala Tyr Arg Ala Arg Thr 260 265

<210> 143

<211> 164 <212> PRT

<213> Homo sapien

<400> 143

Ala Glu Ala Trp Tyr Gly Ala Arg Phe Pro Val Ser Gly Asp Gly Ser 5

Asp Ala Ile Thr Ala Arg Gln Gly Val Ser Arg Gly Val Lys Ala Ala 20

Met Asn Arg Val Leu Cys Ala Pro Ala Ala Gly Ala Val Arg Ala Leu 35

Arg Leu Ile Gly Trp Ala Ser Arg Ser Leu His Pro Leu Pro Gly Ser

Arg Asp Arg Ala His Pro Ala Ala Glu Glu Asp Asp Pro Asp Arg

Pro Ile Glu Phe Ser Ser Ser Lys Ala Asn Pro His Arg Trp Ser Val

Gly His Thr Met Gly Lys Gly His Gln Arg Pro Trp Trp Lys Val Leu

Pro Leu Ser Cys Phe Leu Val Ala Leu Ile Ile Trp Cys Tyr Leu Arg 115 120

Glu Glu Ser Glu Ala Asp Gln Trp Leu Arg Gln Val Trp Gly Glu Val 135

Pro Glu Pro Ser Asp Arg Ser Glu Glu Pro Glu Thr Pro Ala Ala Tyr 150 155

Arg Ala Arg Thr

<210> 144

<211> 99

<212> PRT

<213> Homo sapien

<400> 144

Met Val Arg Ala Gly Ala Val Gly Ala His Leu Pro Ala Ser Gly Leu

Asp Ile Phe Gly Asp Leu Lys Lys Met Asn Lys Arg Gln Leu Tyr Tyr 25

Gln Val Leu Asn Phe Ala Met Ile Val Ser Ser Ala Leu Met Ile Trp 40

Lys Gly Leu Ile Val Leu Thr Gly Ser Glu Ser Pro Ile Val Val Val 50 55

Leu Ser Gly Ser Met Glu Pro Ala Phe His Arg Gly Asp Leu Leu Phe 75

Leu Thr Asn Phe Arg Glu Asp Pro Ile Arg Ala Glu Ile Met Glu Thr 90

Ser Asn Phe

<210> 145

<211> 136 <212> PRT <213> Homo sapien

<400> 145

Val Ile Cys Glu Arg Glu Leu Gly Val Leu Leu Ala Pro Asp Gln Ser 5 10

Arg Glu Ile Gln Leu Leu Ser Ser Pro Phe Pro Glu Leu Pro Pro 20 25 30

Glu Val Cys Gly Val Thr Arg Cys Ser Met Phe Pro Pro Lys Gly Arg
35 40 45

Thr Arg Leu Arg Ser Pro Val Ala Ala Leu Pro Arg Ser Pro Gly Ser 50 55 60

Ser Leu Ala Glu Val Pro Thr Pro Gln His Ser Gly Ser Gly Ser Phe 70 75 80

Leu Pro Ser Gly Ser Phe Leu Ala Gly Gln Cys Pro Arg Leu Ala Arg 85 90 95

Leu Arg Phe Pro Asp Ala Gln Ala Ser Arg Arg Ser Arg Gly Arg Lys
100 105 110

Asp Ala Gly Pro Val Gly Gly Gly Arg Gln Val Leu Arg Ser Arg Leu 115 120 125

Cys His Pro Glu Pro Ala Gly Arg 130 135

<210> 146

<211> 139

<212> PRT

<213> Homo sapien

<400> 146

Met Ser Lys Thr Phe Arg Gln Thr Glu Gly Ser Gln Gly Asp Arg Arg 1 5 10 15

Val His Ser Lys Ala Thr Ala Ser Pro Asp Pro Ala Leu Pro Ser Leu 20 25 30

Leu Trp Thr Gln Glu Lys Ser Asn Pro His Ser Glu Phe Ser His Gln 35 40

Asn Leu Ile Ile Asn Thr Leu Ser Leu Phe Phe Ala Gly Thr Glu Thr 50 55 60

Thr Ser Thr Thr Leu Arg Tyr Gly Phe Leu Leu Met Leu Lys Tyr Pro 65 70 75 80

His Val Ala Glu Arg Val Tyr Lys Glu Ile Glu Gln Val Val Gly Pro 85 90 95

192

His Arg Pro Pro Ala Leu Asp Asp Arg Ala Lys Met Pro Tyr Thr Glu 100 105 110

Ala Val Ile Arg Glu Ile Gln Arg Phe Ala Asp Leu Pro Met Gly 115 120 125

Val Pro His Ile Val Thr Gln His Thr Ser Phe 130 135

<210> 147

<211> 165

<212> PRT

<213> Homo sapien

<400> 147

Arg His Arg Ser Asp Thr Pro Gly Val Trp Cys Gly Gln Asn Thr Pro 1 5 10 15

Asn Ile Pro Asp Leu Leu Pro Ala Pro Leu Lys Gly Leu Arg Glu Gly 20 25 30

Gly Gln Arg Ile Pro Gly Ser Phe Ser Val Pro Thr Ser Val Asp Asn 35 40 45

Gly Ser Asp Ser Leu Gln Leu Pro Ala Ser Glu Arg Pro Ala Ala Ser 50 55 60

Gln Leu Pro Ser Leu Pro Trp His Gln Leu Ser Glu Val Ala Val Gln 65 70 75 80

Met Ser Gly Gly Val Arg Leu Leu Lys Ile Ile Ile Tyr Lys Ile Ile 85 90 95

Tyr Ile Tyr Phe Glu Thr Glu Ser His Ser Val Ala Gln Ala Gly Val 100 105 110

Gln Trp Arg Asp Leu Gly Ser Leu Gln Pro Pro Pro Pro Gly Phe Lys 115 120 125

Lys Phe Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys Val 130 135 140

Leu Pro Cys Leu Ala Asn Phe Cys Ile Phe Ser Arg Asp Gly Val Ser 145 150 155 160

Pro Cys Trp Pro Gly

193

<210> 148

<211> 136 <212> PRT

<213> Homo sapien

<400> 148

Met Leu Leu Glu Arg Arg Ser Val Met Asp Pro Pro Gly Gln Val Gln 5 10

Thr Tyr Glu Glu Gly Leu Phe Tyr Ala Gln Lys Ser Lys Lys Pro Leu 25

Met Val Ile His His Leu Glu Asp Cys Gln Tyr Ser Gln Ala Leu Lys 40

Lys Val Phe Ala Gln Asn Glu Glu Ile Gln Glu Met Ala Gln Asn Lys

Phe Ile Met Leu Asn Leu Met His Glu Thr Thr Asp Lys Asn Leu Ser 75

Pro Asp Gly Gln Tyr Val Pro Arg Ile Met Phe Val Asp Pro Ser Leu 90

Thr Val Arg Ala Asp Ile Ala Gly Arg Tyr Ser Asn Arg Leu Tyr Thr

Tyr Glu Pro Arg Asp Leu Pro Leu Leu Ile Glu Asn Met Lys Lys Ala 115

Leu Arg Leu Ile Gln Ser Glu Leu 130

<210> 149 <211> 196 <212> PRT

<213> Homo sapien

<400> 149

Met Glu Gly Asn Gly Pro Ala Ala Val His Tyr Gln Pro Ala Ser Pro

Pro Arg Asp Ala Cys Val Tyr Ser Ser Cys Tyr Cys Glu Glu Asn Ile

Trp Lys Leu Cys Glu Tyr Ile Lys Asn His Asp Gln Tyr Pro Leu Glu

194

35 40 45

Glu Cys Tyr Ala Val Phe Ile Ser Asn Glu Arg Lys Met Ile Pro Ile 50 . 55 60

Trp Lys Gln Gln Ala Arg Pro Gly Asp Gly Pro Val Ile Trp Asp Tyr 65 70 75 80

His Val Val Leu Leu His Val Ser Ser Gly Gly Gln Asn Phe Ile Tyr 85 90 95

Asp Leu Asp Thr Val Leu Pro Phe Pro Cys Leu Phe Asp Thr Tyr Val

Glu Asp Ala Phe Lys Ser Asp Asp Ile His Pro Gln Phe Arg Arg 115 120 125

Lys Phe Arg Val Ile Arg Ala Asp Ser Tyr Leu Lys Asn Phe Ala Ser 130 135 140

Asp Arg Ser His Met Lys Asp Ser Ser Gly Asn Trp Arg Glu Pro Pro 145 150 155 160

Pro Pro Tyr Pro Cys Ile Glu Thr Gly Gly Ile Asn Pro Val Asp Asn 165 170 175

Phe Leu Thr Phe Lys Lys Ile Lys Gly Pro Ser Pro Tyr Tyr Cys
180 185 190

Leu Ala Phe Ile 195

<210> 150

<211> 69

<212> PRT

<213> Homo sapien

<400> 150

Arg Glu Arg Glu Arg Glu Arg Glu Ser Gly His Lys Asn Cys
1 10 15

Phe Val Lys Val Lys Asp Ser Lys Leu Pro Ala Tyr Lys Asp Leu Gly
20 25 30

Lys Asn Leu Pro Phe Pro Thr Tyr Phe Pro Asp Gly Asp Glu Glu Glu 35 40

Leu Pro Glu Asp Leu Tyr Asp Glu Asn Val Cys Gln Pro Gly Ala Pro 55

Ser Ile Thr Phe Ala

<210> 151 <211> 69

<212> PRT

<213> Homo sapien

<400> 151

Arg Glu Arg Glu Arg Glu Arg Glu Ser Gly His Lys Asn Cys

Leu Val Lys Val Lys Asp Ser Lys Leu Pro Ala Tyr Lys Asp Leu Gly 20

Lys Asn Leu Pro Phe Pro Thr Tyr Phe Pro Asp Gly Asp Glu Glu Glu 40

Leu Pro Glu Asp Leu Tyr Asp Glu Asn Val Cys Gln Pro Gly Ala Pro

Ser Ile Thr Phe Ala 65

<210> 152

<211> 174 <212> PRT <213> Homo sapien

<400> 152

Met Glu Ser Arg Thr Leu Leu Gly Gln Leu Trp Val Pro Leu Ala Ser

Gly Trp Ala Arg Gly Gln Arg Thr Cys Arg Arg Arg Leu Arg Tyr Gly 25

Leu Val Lys Val Glu Met Asp Gly Arg Met Asp Ser Leu Gly His Met 35 40

Ala Arg Ser Trp Glu Asp Gly His Arg Pro Lys Ser Val Leu Val Tyr 50 55

His Cys Thr Ser Gly Asn Leu Asn Pro Cys Asn Arg Gly Lys Met Gly 70

Phe Gln Val Leu Ala Thr Phe Glu Ile Pro Ile Pro Phe Glu Arg Ala 90

Leu Thr Arg Pro Tyr Ala Asp Phe Thr Thr Ser Asn Phe Arg Thr Gln 105

Tyr Trp Asn Ala Ile Ser Gln Gln Ala Pro Ala Ile Ile Tyr Asp Phe 120

Tyr Leu Trp Leu Thr Gly Arg Lys Pro Arg Gln Gly Gln Asp Gly Ser

Lys Ser Asn Gln Pro Pro Leu Gln Pro Ala Thr Ser Cys Trp Gln Asp

Leu Phe Leu His Pro Val Lys Ser Gln Gly Gly Thr Arg Ala 165 170

<210> 153

<211> 167 <212> PRT <213> Homo sapien

<220>

<221> MISC_FEATURE

<222> (44)..(44)

<223> X=any amino acid

<400> 153

Gly Gln Leu Trp Val Pro Leu Ala Ser Gly Trp Ala Arg Gly Gln Arg

Thr Cys Arg Arg Arg Leu Arg Tyr Gly Leu Val Lys Val Glu Met Asp

Gly Arg Met Asp Ser Leu Gly His Met Ala Arg Xaa Trp Glu Asp Gly

His Arg Pro Lys Ser Val Leu Val Tyr His Cys Thr Ser Gly Asn Leu 50 55

Asn Pro Cys Asn Arg Gly Lys Met Gly Phe Gln Val Leu Ala Thr Phe 65 70

Glu Ile Pro Ile Pro Phe Glu Arg Ala Leu Thr Arg Pro Tyr Ala Asp 85

Phe Thr Thr Ser Asn Phe Arg Thr Gln Tyr Trp Asn Ala Ile Ser Gln 100 105 110

Gln Ala Pro Ala Ile Ile Tyr Asp Phe Tyr Leu Trp Leu Thr Gly Arg
115 120 125

Lys Pro Arg Gln Gly Gln Asp Gly Ser Lys Ser Asn Gln Pro Pro Leu 130 135 140

Gln Pro Ala Thr Ser Cys Trp Gln Asp Leu Phe Leu His Pro Val Lys 145 150 155 160

Ser Gln Gly Gly Thr Arg Ala 165

<210> 154

<211> 125

<212> PRT

<213> Homo sapien

<400> 154

Met Gln Gln Ala Arg Glu Thr Ala Val Gln Gln Tyr Lys Lys Leu Glu

1 10 15

Glu Glu Ile Gln Thr Leu Arg Val Tyr Tyr Ser Leu His Lys Ser Leu 20 25 30

Ser Gln Glu Glu Asn Leu Lys Asp Gln Phe Asn Tyr Thr Leu Ser Thr 35 40 45

Tyr Glu Glu Ala Leu Lys Asn Arg Glu Asn Ile Val Ser Ile Thr Gln 50 55 60

Gln Gln Asn Glu Glu Leu Ala Thr Gln Leu Gln Gln Ala Leu Thr Glu 65 70 75 80

Arg Ala Asn Met Glu Leu Gln Leu Gln His Ala Arg Glu Ala Ser Gln 85 90 95

Val Ala Asn Glu Lys Val Gln Lys Leu Glu Arg Leu Val Asp Val Leu 100 105 110

Arg Lys Lys Val Gly Thr Gly Thr Met Arg Thr Val Ile 115 120 125

198

<210> 155

<211> 106

<212> PRT

<213> Homo sapien

<400> 155

Met Pro Gln Ser Arg Arg Gln Trp Asp Phe Glu Gly Gly Lys Gly Arg
1 10 15

Arg Gln Ala Gly His Ala Leu Arg Gly Ala Arg Thr His Leu Leu His 20 25 30

Pro His Val Phe Arg Ala Leu Ser Leu Trp Glu Ala Phe Phe Arg Thr 35 40 45

Ala Leu Val Asn Trp Lys Arg Asn Pro Ser Pro Trp Pro Cys Ser 50 55 60

Asp Leu Asp Leu Ser Glu Val Thr Leu Pro Leu Arg Ala Leu Gln Ser 65 70 75 80

Leu Leu Ala Gly Gly Gly Thr Ser Pro Ser His Ser His Phe Leu Thr 85 90 95

Leu Ser Leu Cys Ile Thr Gly Ser Leu Leu 100 105

<210> 156

<211> 237

<212> PRT

<213> Homo sapien

<400> 156

Met Pro Gly Pro Ala Pro Gly Arg Gly Gly Ser Gly Val Gly Leu Arg
1 10 15

Gly Leu Ser Ser Leu Gln Ala Pro Gln Pro Ser Arg Val Pro Trp Pro 20 25 30

Met Ala Ala Tyr Ser Tyr Arg Pro Gly Pro Gly Ala Gly Pro Gly Pro 35 40 45

Ala Ala Gly Ala Ala Leu Pro Asp Gln Ser Phe Leu Trp Asn Val Phe 50 55 60

Gln Arg Val Asp Lys Asp Arg Ser Gly Val Ile Ser Asp Thr Glu Leu 65 70 75 80

Gln Gln Ala Leu Ser Asn Gly Thr Trp Thr Pro Phe Asn Pro Val Thr 85 90 95

Val Arg Ser Ile Ile Ser Met Phe Asp Arg Glu Asn Lys Ala Gly Val 100 105 110

Asn Phe Ser Glu Phe Thr Gly Val Trp Lys Tyr Ile Thr Asp Trp Gln 115 120 125

Asn Val Phe Arg Thr Tyr Asp Arg Asp Asn Ser Gly Met Ile Asp Lys 130 135 140

Asn Glu Leu Lys Gln Ala Leu Ser Gly Phe Gly Tyr Arg Leu Ser Asp 145 150 155 160

Gln Phe His Asp Ile Leu Ile Arg Lys Phe Asp Arg Gln Gly Arg Gly 165 170 175

Gln Ile Ala Phe Asp Asp Phe Ile Gln Gly Cys Ile Val Leu Gln Thr 180 185 190

Leu Ala Pro Ser Pro Arg Pro Glu Cys Gly Gly Ala Asn Thr Ala His 195 200 205

Cys Ser Leu Asp Pro Gln Ala Gln Ala Ile Leu Thr Pro Arg Thr Pro 210 215 220

Lys Val Leu Gly Ser Gln Ala Arg Val Thr Met Leu Ala 225 230 235

<210> 157

<211> 67

<212> PRT

<213> Homo sapien

<400> 157

Lys Asp Gln Ser Ala Ala Glu Asp Pro Ala Arg Ala Arg Thr Arg Ala 1 5 10 15

Arg Arg Arg Ser Ala Lys Glu His Asn Thr His Arg Ala Cys Lys Ala
20 25 30

Ala Ala Arg Ala Pro His Ala Tyr Pro Ala His Thr Val Gln Glu Asp 35 40 45

Asp Val Ala Val His Thr Pro Trp His Gln Pro Thr Pro Arg Thr Ser

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200

50 55 60

Ala Ser Leu

<210> 158 <211> 156 <212> PRT <213> Homo sapien

<400> 158

Lys Asp Gln Ser Ala Ala Glu Asp Pro Ala Arg Ala Arg Thr Arg Ala

Arg Arg Arg Ser Ala Lys Glu His Asn Thr His Arg Ala Cys Lys Ala

Ala Ala Arg Ala Pro His Ala Tyr Pro Ala His Thr Val Gln Arg Gly

Arg Arg Gly Arg Pro His Pro Val Ala Pro Ala Asn Ala Pro His Leu

Gly Leu Ser Leu Ile Ser Leu Cys Val Val Val Thr Leu Phe Val Ile 70 75

Val Cys Ser Val Ile Val Cys Tyr Phe Tyr Leu Leu Phe Cys Phe Val 90

Val Val Cys Val Phe Val Phe Leu Phe Phe Phe Val Phe Leu Phe Phe 100

Phe Phe Phe Asn Phe Cys Ile Leu Ile Asn Val Phe Asn Tyr Asn Cys 120

Phe Lys Arg Ile Pro Ala Phe Gln Lys Phe Ile Leu Ser Leu Glu Thr

Arg Gln Gly His Thr Gly Phe Thr Ser Tyr Val Ile 145 150

<210> 159

<211> 829

<212> PRT <213> Homo sapien

<400> 159

Met Thr Thr Arg Gln Ala Thr Lys Asp Pro Leu Leu Arg Gly Val Ser 1 5 10 15

Pro Thr Pro Ser Lys Ile Pro Val Arg Ser Gln Lys Arg Thr Pro Phe 20 25 30

Pro Thr Val Thr Ser Cys Ala Val Asp Gln Glu Asn Gln Asp Pro Arg
35 40 45

Arg Trp Val Gln Lys Pro Pro Leu Asn Ile Gln Arg Pro Leu Val Asp 50 55 60

Ser Ala Gly Pro Arg Pro Lys Ala Arg His Gln Ala Glu Thr Ser Gln 65 70 75 80

Arg Leu Val Gly Ile Ser Gln Pro Arg Asn Pro Leu Glu Glu Leu Arg 85 90 95

Pro Ser Pro Arg Gly Gln Asn Val Gly Pro Gly Pro Pro Ala Gln Thr

Glu Ala Pro Gly Thr Ile Glu Phe Val Ala Asp Pro Ala Ala Leu Ala 115 120 125

Thr Ile Leu Ser Gly Glu Gly Val Lys Ser Cys His Leu Gly Arg Gln 130 135 140

Pro Ser Leu Ala Lys Arg Val Leu Val Arg Gly Ser Gln Gly Gly Thr 145 150 155 160

Thr Gln Arg Val Gln Gly Val Arg Ala Ser Ala Tyr Leu Ala Pro Arg 165 170 175

Thr Pro Thr His Arg Leu Asp Pro Ala Arg Ala Ser Cys Phe Ser Arg 180 185 190

Leu Glu Gly Pro Gly Pro Arg Gly Arg Thr Leu Cys Pro Gln Arg Leu 195 200 205

Gln Ala Leu Ile Ser Pro Ser Gly Pro Ser Phe His Pro Ser Thr Arg 210 215 220

Pro Ser Phe Gln Glu Leu Arg Arg Glu Thr Ala Gly Ser Ser Arg Thr 225 230 235 240

Ser Val Ser Gln Ala Ser Gly Leu Leu Glu Thr Pro Val Gln Pro

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202

255 250 245 Ala Phe Ser Leu Pro Lys Gly Glu Arg Glu Val Val Thr His Ser Asp 265 Glu Gly Gly Val Ala Ser Leu Gly Leu Ala Gln Arg Val Pro Leu Arg 280 Glu Asn Arg Glu Met Ser His Thr Arg Asp Ser His Asp Ser His Leu 290 Met Pro Ser Pro Ala Pro Val Ala Gln Pro Leu Pro Gly His Val Val Pro Cys Pro Ser Pro Phe Gly Arg Ala Gln Arg Val Pro Ser Pro Gly 330 325 Pro Pro Thr Leu Thr Ser Tyr Ser Val Leu Arg Arg Leu Thr Val Gln Pro Lys Thr Arg Phe Thr Pro Met Pro Ser Thr Pro Arg Val Gln Gln 360 365 Ala Gln Trp Leu Arg Gly Val Ser Pro Gln Ser Cys Ser Glu Asp Pro 375 Ala Leu Pro Trp Glu Gln Val Ala Val Arg Leu Phe Asp Gln Glu Ser Cys Ile Arg Ser Leu Glu Gly Ser Gly Lys Pro Pro Val Ala Thr Pro 410 405 Ser Gly Pro His Ser Asn Arg Thr Pro Ser Leu Gln Glu Val Lys Ile

Gln Val Ser Leu Cys Gly Gln Gln Leu Cys Cys Leu Leu Asn Ser Asp

Trp Ala Glu Glu Glu Gly Lys Glu Met Gly Asp Gln Glu Glu Asp Ser 450 455

Val Gly Arg Leu Leu Asn Ala His Leu Asp Val Thr Leu Gly Cys Ser 465

Leu Pro Pro Gln Arg Ile Gly Ile Leu Gln Gln Leu Leu Arg Gln Glu 490 485

Val	Glu	Gly	Leu 500	Val	Gly	Gly	Gln	Сув 505	Val	Pro	Leu	Asn	Gly 510	Gly	Ser	
Ser	Leu	Asp 515	Met	Val	Glu	Leu	Gln 520	Pro	Leu	Leu	Thr	Glu 525	Ile	Ser	Arg	
Thr	Leu 530	Asn	Ala	Thr	Glu	His 535	Asn	Ser	Gly	Thr	Ser 540	His	Leu	Pro	Gly	
Leu 545	Leu	Lys	His	Ser	Gly 550	Leu	Pro	Lys	Pro	Cys 555	Leu	Pro	Glu	Glu	Cys 560	
Gly	Glu	Pro	Gln	Pro 565	Сув	Pro	Pro	Ala	Glu 570	Pro	Gly	Pro	Pro	Glu 575	Ala	
Phe	Сув	Arg	Ser 580	Glu	Pro	Glu	Ile	Pro 585	Glu	Pro	Ser	Leu	Gln 590	Glu	Gln	
Leu	Glu	Val 595	Pro	Glu	Pro	Tyr	Pro 600	Pro	Ala	Glu	Pro	Arg 605	Pro	Leu	Glu	
Ser	Сув 610	Сув	Arg	Ser	Glu	Pro 615	Glu	Ile	Pro	Glu	Ser 620	Ser	Arg	Gln	Glu	
Gln 625	Leu	Glu	Val	Pro	Glu 630	Pro	Сув	Pro	Pro	Ala 635	Glu	Pro	Arg	Pro	Leu 640	
Glu	Ser	Tyr	Сув	Arg 645	Ile	Glu	Pro	Glu	Ile 650	Pro	Glu	Ser	Ser	Arg 655	Gln	
Glu	Gln	Leu	Glu 660	Val	Pro	Glu	Pro	Сув 665	Pro	Pro	Ala	Glu	Pro 670	Gly	Pro	
Leu	Gln	Pro 675	Ser	Thr	Gln	Gly	Gln 680	Ser	Gly	Pro	Pro	Gly 685	Pro	Cys	Pro	
Arg	Val 690	Glu	Leu	Gly	Ala	Ser 695	Glu	Pro	Сув	Thr	Leu 700	Glu	His	Arg	Ser	
Leu 705	Glu	Ser	Ser	Leu	Pro 710	Pro	Cys	Сув	Ser	Gln 715	Trp	Ala	Pro	Ala	Thr 720	
Thr	Ser	Leu	Ile	Phe 725	Ser	Ser	Gln	His	Pro 730	Leu	Cys	Ala	Ser	Pro 735	Pro	

204

Ile Cys Ser Leu Gln Ser Leu Arg Pro Pro Ala Gly Gln Ala Gly Leu 740 . 745 . 750

Ser Asn Leu Ala Pro Arg Thr Leu Ala Leu Arg Glu Arg Leu Lys Ser 755 760 765

Cys Leu Thr Ala Ile His Cys Phe His Glu Ala Arg Leu Asp Asp Glu 770 775 780

Cys Ala Phe Tyr Thr Ser Arg Ala Pro Pro Ser Gly Pro Thr Arg Val 785 790 795 800

Cys Thr Asn Pro Val Ala Thr Leu Leu Glu Trp Gln Asp Ala Leu Cys 805 810 815

Phe Ile Pro Val Gly Ser Ala Ala Pro Gln Gly Ser Pro 820 825

<210> 160

<211> 443

<212> PRT

<213> Homo sapien

<400> 160

Ala Ile Met Thr Thr Arg Gln Ala Thr Lys Asp Pro Leu Leu Arg Gly
1 5 10 15

Val Ser Pro Thr Pro Ser Lys Ile Pro Val Arg Ser Gln Lys Arg Thr
20 25 30

Pro Phe Pro Thr Val Thr Ser Cys Ala Val Asp Gln Glu Asn Gln Asp 35 40 45

Pro Arg Arg Trp Val Gln Lys Pro Pro Leu Asn Ile Gln Arg Pro Leu 50 60

Val Asp Ser Ala Gly Pro Arg Pro Lys Ala Arg His Gln Ala Glu Thr 65 70 75 80

Ser Gln Arg Leu Val Gly Ile Ser Gln Pro Arg Asn Pro Leu Glu Glu 85 90 95

Leu Arg Pro Ser Pro Arg Gly Gln Asn Val Gly Pro Gly Pro Pro Ala
100 105 110

Gln Thr Glu Ala Pro Gly Thr Ile Glu Phe Val Ala Asp Pro Ala Ala

205 115 120 125 Leu Ala Thr Ile Leu Ser Gly Glu Gly Val Lys Ser Cys His Leu Gly Arg Gln Pro Ser Leu Ala Lys Arg Val Leu Val Arg Gly Ser Gln Gly Gly Thr Thr Gln Arg Val Gln Gly Val Arg Ala Ser Ala Tyr Leu Ala 165 170 Pro Arg Thr Pro Thr His Arg Leu Asp Pro Ala Arg Ala Ser Cys Phe 185 Ser Arg Leu Glu Gly Pro Gly Pro Arg Gly Arg Thr Leu Cys Pro Gln 195 Arg Leu Gln Ala Leu Ile Ser Pro Ser Gly Pro Ser Phe His Pro Ser 215 Thr Arg Pro Ser Phe Gln Glu Leu Arg Arg Glu Thr Ala Gly Ser Ser Arg Thr Ser Val Ser Gln Ala Ser Gly Leu Leu Glu Thr Pro Val 245 Gln Pro Ala Phe Ser Leu Pro Lys Gly Glu Arg Glu Val Val Thr His 270 Ser Asp Glu Gly Gly Val Ala Ser Leu Gly Leu Ala Gln Arg Val Pro Leu Arg Glu Asn Arg Glu Met Ser His Thr Arg Asp Ser His Asp Ser 295 His Leu Met Pro Ser Pro Ala Pro Val Ala Gln Pro Leu Pro Gly His 305 310 Val Val Pro Cys Pro Ser Pro Phe Gly Arg Ala Gln Arg Val Pro Ser 325 Pro Gly Pro Pro Thr Leu Thr Ser Tyr Ser Val Leu Arg Arg Leu Thr 340 345 350 Val Gln Pro Lys Thr Arg Phe Thr Pro Met Pro Ser Thr Pro Arg Val

355

Gln Gln Ala Gln Trp Leu Arg Gly Val Ser Pro Gln Ser Cys Ser Glu

Asp Pro Ala Leu Pro Trp Glu Gln Val Ala Val Arg Leu Phe Asp Gln 385 390 395

Glu Ser Cys Ile Arg Ser Leu Glu Gly Ser Gly Lys Pro Pro Val Ala

Thr Pro Ser Gly Pro His Ser Asn Arg Thr Pro Ser Leu Gln Glu Val

Lys Ile Gln Val Ser Leu Cys Gly Gln Gln Leu 440

<210> 161

<211> 138

<212> PRT <213> Homo sapien

<400> 161

Met Leu Pro His Leu Pro Pro Trp Pro Ser Leu Ala Leu Pro Gln Glu 10

Glu Gly Arg Gly Cys Thr Ser Ser Pro Val Leu Leu Ile Gly Leu Ala

Val Gly Gly Gly Gly Glu Asp Ser Thr Trp Trp Lys Tyr Arg Thr 40

Pro Asp Leu Pro Leu Asn Phe Pro Cys Pro Ser Gly Leu Ser Asn Leu

Ala Pro Arg Thr Leu Ala Leu Arg Glu Arg Leu Lys Ser Cys Leu Thr 70

Ala Ile His Cys Phe His Glu Ala Arg Leu Asp Asp Glu Cys Ala Phe 90 85

Tyr Thr Ser Arg Ala Pro Pro Ser Gly Pro Thr Arg Val Cys Thr Asn 100 105

Pro Val Ala Thr Leu Leu Glu Trp Gln Asp Ala Leu Cys Phe Ile Pro 115 120 125

Val Gly Ser Ala Ala Pro Gln Gly Ser Pro 130 135

<210> 162

<211> 60

<212> PRT

<213> Homo sapien

<400> 162

Met Arg Ala Arg Thr Pro Pro Ala Ala Pro Lys Glu Lys Ala Phe Ser 1 10 15

Ser Glu Ile Glu Asp Leu Pro Tyr Leu Ser Thr Thr Glu Met Tyr Leu 20 25 30

Cys Arg Trp His Gln Pro Pro Pro Ser Pro Leu Pro Leu Arg Glu Ser 35 40 45

Ser Pro Lys Lys Glu Glu Thr Val Ala Ser Lys Ala 50 55 60

<210> 163

<211> 99

<212> PRT

<213> Homo sapien

<400> 163

Lys Lys Gly Phe Leu Cys Cys Glu Met His Arg Thr Ile Leu Cys His 1 5 10 15

Ala Arg Leu Phe Leu Gln Leu Ile Leu Cys Glu Ile Trp Glu Gly Gly 20 25 30

Leu Trp Val Phe Ser Gly Ala Asn Gly Asn Phe Trp Val Gly Glu Pro 35 40 .45

Ala Trp Gly Glu Phe Ser Pro Gly Pro Pro Leu Phe Asn Tyr Ile 50 55 60

Asn Ile Tyr Leu Tyr Ile Tyr Val Pro Val Trp Gly Ala Gly Gly Ile 65 70 75 80

Cys Gln Arg Pro Thr Val Leu Leu Tyr Leu Thr Ile Leu His Lys Gly 85 90 95

Ser Lys Met

<210> 164

<211> 294 <212> PRT

<213> Homo sapien

<400> 164

Met Phe Phe Ser Ala Ala Leu Arg Ala Arg Ala Ala Gly Leu Thr Ala

His Trp Gly Arg His Val Arg Asn Leu His Lys Thr Ala Met Gln Asn 20

Gly Ala Gly Gly Ala Leu Phe Val His Arg Asp Thr Pro Glu Asn Asn

Pro Asp Thr Pro Phe Asp Phe Thr Pro Glu Asn Tyr Lys Arg Ile Glu 50

Ala Ile Val Lys Asn Tyr Pro Glu Gly His Lys Ala Ala Ala Val Leu 70

Pro Val Leu Asp Leu Ala Gln Arg Gln Asn Gly Trp Leu Pro Ile Ser

Ala Met Asn Lys Val Ala Glu Val Leu Gln Val Pro Pro Met Arg Val 100

Tyr Glu Val Ala Thr Phe Tyr Thr Met Tyr Asn Arg Lys Pro Val Gly 120

Lys Tyr His Ile Gln Val Cys Thr Thr Thr Pro Cys Met Leu Arg Asn 130

Ser Asp Ser Ile Leu Glu Ala Ile Gln Lys Lys Leu Gly Ile Lys Val 150

Gly Glu Thr Thr Pro Asp Lys Leu Phe Thr Leu Ile Glu Val Glu Cys 170

Leu Gly Ala Cys Val Asn Ala Pro Met Val Gln Ile Asn Asp Asn Tyr 180

Tyr Glu Asp Leu Thr Ala Lys Asp Ile Glu Glu Ile Ile Asp Glu Leu 200

Lys Ala Gly Lys Ile Pro Lys Pro Gly Pro Arg Ser Gly Arg Phe Ser

210 215 220

Cys Glu Pro Ala Gly Gly Leu Thr Ser Leu Thr Glu Pro Pro Lys Gly 230

Pro Gly Phe Gly Val Gln Cys Val His Leu His Arg Lys Phe Gln Gly 250

Ala Ile Ala Val Val Val Asn His Arg Ile Ser Val Gly Met Ala Glu 260 265

Gly Glu Thr Gly Leu Gly Cys Arg Glu Leu Val Glu Val Gln Pro 280

Tyr Leu Pro Gly Arg Pro 290

<210> 165 <211> 250

<212> PRT

<213> Homo sapien

<400> 165

Met Phe Phe Ser Ala Ala Leu Arg Ala Arg Ala Ala Gly Leu Thr Ala

His Trp Gly Arg His Val Arg Asn Leu His Lys Thr Ala Met Gln Asn 20

Gly Ala Gly Gly Ala Leu Phe Val His Arg Asp Thr Pro Glu Asn Asn 40

Pro Asp Thr Pro Phe Asp Phe Thr Pro Glu Asn Tyr Lys Arg Ile Glu 50

Ala Ile Val Lys Asn Tyr Pro Glu Gly His Lys Ala Ala Ala Val Leu 70

Pro Val Leu Asp Leu Ala Gln Arg Gln Asn Gly Trp Leu Pro Ile Ser

Ala Met Asn Lys Val Ala Glu Val Leu Gln Val Pro Pro Met Arg Val 100

Tyr Glu Val Ala Thr Phe Tyr Thr Met Tyr Asn Arg Lys Pro Val Gly 120

Lys Tyr His Ile Gln Val Cys Thr Thr Thr Pro Cys Met Leu Arg Asn 130 135

Ser Asp Ser Ile Leu Glu Ala Ile Gln Lys Lys Leu Gly Ile Lys Val 150

Gly Glu Thr Thr Pro Asp Lys Leu Phe Thr Leu Ile Glu Val Glu Cys 170

Leu Gly Ala Cys Val Asn Ala Pro Met Val Gln Ile Asn Asp Asn Tyr 180

Tyr Glu Asp Leu Thr Ala Lys Asp Ile Glu Glu Ile Ile Asp Glu Leu 200

Lys Ala Gly Lys Ile Pro Lys Pro Gly Pro Arg Ser Gly Arg Phe Ser

Cys Glu Pro Ala Gly Gly Leu Thr Ser Leu Thr Glu Arg Pro Pro Val 230

Cys Cys Gln Ser Phe Glu Ala Cys Arg Val 245

<210> 166

<211> 232

<212> PRT

<213> Homo sapien

<400> 166

Met Phe Phe Ser Ala Ala Leu Arg Ala Arg Ala Ala Gly Leu Thr Ala

His Trp Gly Arg His Val Arg Asn Leu His Lys Thr Ala Met Gln Asn 20

Gly Ala Gly Gly Ala Leu Phe Val His Arg Asp Thr Pro Glu Asn Asn 40

Pro Asp Thr Pro Phe Asp Phe Thr Pro Glu Asn Tyr Lys Arg Ile Glu

Ala Ile Val Lys Asn Tyr Pro Glu Gly His Lys Ala Ala Val Leu

Pro Val Leu Asp Leu Ala Gln Arg Gln Asn Gly Trp Leu Pro Ile Ser

90 95 85

Ala Met Asn Lys Val Ala Glu Val Leu Gln Val Pro Pro Met Arg Val 100

Tyr Glu Val Ala Thr Phe Tyr Thr Met Tyr Asn Arg Lys Pro Val Gly

Lys Tyr His Ile Gln Val Cys Thr Thr Pro Cys Met Leu Arg Asn 135 130

Ser Asp Ser Ile Leu Glu Ala Ile Gln Lys Lys Leu Gly Arg Glu Tyr 150 145

Met Ile Phe Val Thr Leu Ile Lys Ser Arg Ile Val Ser Leu Asp Leu 170

Val His Phe Tyr Leu Lys Phe Pro Thr Ser Ala Ile Leu Leu Asp Leu 180

Tyr Leu Pro Ser Asn Ile Leu Cys Tyr Cys Val Ser Thr Ser Leu Phe

Leu Pro Ile Trp Tyr Ser Ser Ser Val Leu Ser Val Lys Ala Glu Phe 215 220 210

Leu Ile Phe Ser Phe Leu Ile Ser 225 230

<210> 167 <211> 28 <212> PRT

<213> Homo sapien

<400> 167

Met Asp Ser Arg Pro Arg Tyr Ile Pro Phe Lys Gln Tyr Ala Gly Lys

Tyr Val Leu Leu Ser Thr Trp Pro Ala Thr Glu Ala 20 25

<210> 168

<211> 106

<212> PRT

<213> Homo sapien

<400> 168

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212

Trp Ile Arg Gly Arg Gly Thr Ser Pro Ser Ser Ser Met Leu Ala Asn 10

Thr Ser Ser Cys Gln Arg Gly Gln Leu Leu Arg Pro Asp Gly Pro Val

His Gln Val Asp Arg Leu Cys Gly Ala Cys Pro Gly Gln Arg Val Phe 40

Leu Cys Pro Gly Glu Pro Gly Ala Lys Ser Gly Arg His Leu Ser Gly

Gly Val Pro Pro Tyr Thr Glu Cys Asp His Ala Gln Pro Leu Ala Arg

Pro Gly Ala Val Glu Ser Cys Asn His Glu Val Cys Ala Gln Thr Gly 90

Glu Thr Val Gln Pro Leu Met Ala Arg Arg

<210> 169 <211> 137 <212> PRT <213> Homo sapien

<400> 169

Met Lys Val Leu Gly Arg Ser Phe Phe Trp Val Leu Phe Pro Val Leu

Pro Trp Ala Val Gln Ala Val Glu His Glu Val Ala Gln Arg Val 25

Ile Lys Leu His Arg Gly Arg Gly Val Ala Ala Met Gln Ser Arg Gln

Trp Val Arg Asp Ser Cys Arg Lys Leu Ser Gly Leu Leu Arg Gln Lys 55

Asn Ala Val Leu Asn Lys Leu Lys Thr Ala Ile Gly Ala Val Glu Lys 70

Asp Val Gly Leu Ser Asp Glu Glu Lys Leu Phe Gln Val His Thr Phe 85

Glu Ile Phe Gln Lys Glu Leu Asn Glu Ser Glu Asn Ser Val Phe Gln 100 105 110

213

Ala Val Tyr Gly Leu Gln Arg Ala Leu Gln Gly Asp Tyr Asn Asp Gly

Pro Trp Lys Gly Ser Val Cys Gly Glu 130 135

<210> 170

<211> 241

<212> PRT <213> Homo sapien

<400> 170

Met Lys Val Leu Gly Arg Ser Phe Phe Trp Val Leu Phe Pro Val Leu 10

Pro Trp Ala Val Gln Ala Val Glu His Glu Glu Val Ala Gln Arg Val

Ile Lys Leu His Arg Gly Arg Gly Val Ala Ala Met Gln Ser Arg Gln

Trp Val Arg Asp Ser Cys Arg Lys Leu Ser Gly Leu Leu Arg Gln Lys

Asn Ala Val Leu Asn Lys Leu Lys Thr Ala Ile Gly Ala Val Glu Lys

Asp Val Gly Leu Ser Asp Glu Glu Lys Leu Phe Gln Val His Thr Phe 90

Glu Ile Phe Gln Lys Glu Leu Asn Glu Ser Glu Asn Ser Val Phe Gln 105

Ala Val Tyr Gly Leu Gln Arg Ala Leu Gln Gly Asp Tyr Lys Asp Val

Val Asn Met Lys Glu Ser Ser Arg Gln Arg Leu Glu Ala Leu Arg Glu 130 135

Ala Ala Ile Lys Glu Glu Thr Glu Tyr Met Glu Leu Leu Ala Ala Glu 145 150

Lys His Gln Val Glu Ala Leu Lys Asn Met Gln His Gln Asn Gln Ser 165 170

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214

Leu Ser Met Leu Asp Glu Ile Leu Glu Asp Val Arg Lys Ala Ala Asp 185 180

Arg Leu Glu Glu Glu Ile Glu Glu His Ala Phe Asp Asp Asn Lys Ser

Val Ser Val Pro Glu Gln Leu Leu His Leu Leu Ser His Ser Leu 215 220

Ile Arg Arg His Val Val Glu Ile Val His Val Tyr Val Phe Asn Val 225 230 235

Asp

<210> 171 <211> 102

<212> PRT

<213> Homo sapien

<220>

<221> MISC_FEATURE

<222> (15)..(15) <223> X=any amino acid

<400> 171

Trp Val Ile Gly Phe Ser Pro Leu Arg Pro Thr His Cys Thr Xaa Thr

Leu Arg Asp Pro Arg Gly Ala Gly Ala Asp Val Arg Ser Ala Pro Ser

Arg Gly Gly Arg Ala Gly Gln Trp Gly Pro His Arg Gly Gly Val Leu 40

Val Ser Gly Pro Gly Trp Arg Thr Arg Thr Leu Val Pro Arg Ala Gly 55

Arg Arg Trp Val His Gly Arg Pro His Pro Arg Ile Pro Ser Pro Ala 70 75

Pro Ser Leu Asp Ser Pro Val Asn Pro Ala Ala Ser Arg Arg Pro Thr 95

Trp Ser Trp Pro Val Leu 100

215

<210> 172

<211> 207

<212> PRT

<213> Homo sapien

<400> 172

Met Lys Ser Ser Gly His Arg Glu Trp Gly Val Gly Lys Pro Gly Thr 1 5 10 15

Pro Gly Asp Arg Ala Arg Glu Gly Gly Ser Gly Pro Asp Pro Ala Pro 20 25 30

Ala Arg Gly Ala Ser Ser Gly Ala Ala Leu Arg Gly Gln Asn Val Ala 35 40 45

Val Ala Glu Thr Arg Arg Gly Arg Pro Asn Ala Thr Leu Gly Pro Ser 50 55 60

Pro Leu Gln Arg Pro Arg Pro Val Thr Cys Pro Arg Phe Ala Ser His 65 70 75 80

Pro Glu Ala Gly Ala Arg Ala Glu Pro Ala Ala Met Ser Gly Glu Pro 85 90 95

Gly Gln Thr Ser Val Ala Pro Pro Pro Glu Glu Val Glu Pro Gly Ser 100 105 110

Gly Val Arg Ile Val Val Glu Tyr Cys Glu Pro Cys Gly Phe Glu Ala 115 120 125

Thr Tyr Leu Glu Leu Ala Ser Ala Val Lys Glu Gln Tyr Pro Gly Ile 130 135 140

Glu Ile Glu Ser Arg Leu Gly Gly Thr Gly Ala Phe Glu Ile Glu Ile 145 150 155 160

Asn Gly Gln Leu Val Phe Ser Lys Leu Glu Asn Gly Gly Phe Pro Tyr
165 170 175

Glu Lys Asp Val Ser Ile Tyr Ser Val Gly Arg Thr Ser Trp Ser Pro 180 185 190

Tyr Pro Asn Ser Ala Ser Ser Cys His Ser Thr Pro Leu Ala His 195 200 205

<210> 173

<211> 208

<212> PRT

<213> Homo sapien

<400> 173

Ser His Glu Val Gln Arg Thr Pro Gly Val Gly Ser Gly Glu Ala Arg

His Ser Gly Arg Pro Gly Gln Gly Arg Arg Val Trp Thr Gly Pro Ser 20 25

Pro Cys Pro Gly Ser Glu Leu Arg Ser Cys Pro Thr Arg Ser Lys Arg

Ser Ser Gly Gly Asp Pro Gln Gly Ala Pro Glu Arg His Pro Arg Pro 55

Leu Pro Ala Pro Glu Ala Pro Pro Arg His Val Pro Ala Val Arg Val 70 75

Thr Pro Gly Ser Arg Gly Pro Ser Gly Pro Ala Ala Met Ser Gly Glu

Pro Gly Gln Thr Ser Val Ala Pro Pro Pro Glu Glu Val Glu Pro Gly 100

Ser Gly Val Arg Ile Val Val Glu Tyr Cys Glu Pro Cys Gly Phe Glu

Ala Thr Tyr Leu Glu Leu Ala Ser Ala Val Lys Glu Gln Tyr Pro Gly

Ile Glu Ile Glu Ser Arg Leu Gly Gly Thr Gly Ala Phe Glu Ile Glu 150

Ile Asn Gly Gln Leu Val Phe Ser Lys Leu Glu Asn Gly Gly Phe Pro 170

Tyr Glu Lys Asp Val Ser Ile Tyr Ser Val Gly Arg Thr Ser Trp Ser 180 185

Pro Tyr Pro Asn Ser Ala Ser Ser Cys His Ser Thr Pro Leu Ala His

<210> 174 <211> 267 <212> PRT

<213> Homo sapien

<400> 174

Met Val Ser Asn Ser Ala Gly Ser Asn Ser Arg Gln Leu Pro Leu Pro 1 5 10 15

217

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Leu Ser Ala Asp Ala Pro Pro Ala Ser Ser Ser His Trp Ser Trp Gln
20 25 30

Pro Ser Arg His Thr Asn Gln Pro Ile Asp Arg Ala Ile Leu Arg Ser 35 40 45

Arg Pro Cys Cys Arg Leu Ser Arg Thr Cys His Trp Ser Leu Gln Pro 50 55 60

Pro Pro Pro Pro Pro Ala Arg Gln Trp Leu Gly Gly Leu Ala Gly Ala 65 70 75 80

Gly Arg Ser Ser Cys Ala Cys Ala Leu Gly Leu Pro Ser Ala Gly Cys 85 90 95

Ser Ala Gly Arg Ala Arg Leu Arg Gly Ala Ala Leu Glu Glu Thr Glu 100 105 110

Ala Ala Gly Gly Pro Glu Ala Gln Glu Glu Asp Glu Asp Glu Glu Glu 115 120 125

Ala Leu Pro His Ser Glu Ala Met Asp Val Phe Gln Glu Gly Leu Ala 130 135 140

Met Val Val Gln Asp Pro Leu Leu Cys Asp Leu Pro Ile Gln Val Thr 145 150 155 160

Leu Glu Glu Val Asn Ser Gln Ile Ala Leu Glu Tyr Gly Gln Ala Met 165 170 175

Thr Val Arg Val Cys Lys Met Asp Gly Glu Val Met Pro Val Val Val 180 185 190

Val Gln Ser Ala Thr Val Leu Asp Leu Lys Lys Ala Ile Gln Arg Tyr 195 200 205

Val Gln Leu Lys Gln Glu Arg Glu Gly Gly Ile Gln His Ile Ser Trp 210 215 220

Ser Tyr Val Trp Arg Thr Tyr His Leu Thr Ser Ala Gly Glu Lys Leu 225 230 235 240

Thr Glu Asp Arg Lys Lys Leu Arg Asp Tyr Gly Ile Arg Asn Arg Asp 245 250 255

Glu Val Ser Phe Ile Lys Lys Leu Arg Gln Lys 260 265

<210> 175

<211> 225

<212> PRT

<213> Homo sapien

<400> 175

Thr Gly Arg Phe Cys Ala Pro Gly Leu Leu Gln Ala Val Ser His Leu 1 5 10 15

Ser Leu Val Thr Ala Ala Ala Pro Pro Pro Arg Arg Ala Ser Gly Trp
20 25 30

Ala Ala Ser Leu Gly Arg Ala Ala Val Pro Ala Arg Ala Arg Leu Ala 35 40 45

Ser Leu Val Arg Ala Gly Ser Ala Gly Arg Ala Arg Leu Arg Gly Ala 50 60

Ala Leu Glu Glu Thr Glu Ala Ala Gly Gly Pro Glu Ala Gln Glu Glu 65 70 75 80

Asp Glu Asp Glu Glu Glu Ala Leu Pro His Ser Glu Ala Met Asp Val 85 90 95

Phe Gln Glu Gly Leu Ala Met Val Val Gln Asp Pro Leu Leu Cys Asp 100 105 110

Leu Pro Ile Gln Val Thr Leu Glu Glu Val Asn Ser Gln Ile Ala Leu 115 120 125

Glu Tyr Gly Gln Ala Met Thr Val Arg Val Cys Lys Met Asp Gly Glu 130 135 140

Val Met Pro Val Val Val Val Gln Ser Ala Thr Val Leu Asp Leu Lys
145 150 155 160

Lys Ala Ile Gln Arg Tyr Val Gln Leu Lys Gln Glu Arg Glu Gly Gly 165 . 170 175

219

Ile Gln His Ile Ser Trp Ser Tyr Val Trp Arg Thr Tyr His Leu Thr 185

Ser Ala Gly Glu Lys Leu Thr Glu Asp Arg Lys Lys Leu Arg Asp Tyr

Gly Ile Arg Asn Arg Asp Glu Val Ser Phe Ile Lys Lys Leu Arg Gln 215 220

Lys 225

<210> 176 <211> 224

<212> PRT

<213> Homo sapien

<400> 176

Met Val Ser Asn Ser Ala Gly Ser Asn Ser Arg Gln Leu Pro Leu Pro

Leu Ser Ala Asp Ala Pro Pro Ala Ser Ser Ser His Trp Ser Trp Gln

Pro Ser Arg His Thr Asn Gln Pro Ile Asp Arg Ala Ile Leu Arg Ser

Arg Pro Cys Cys Arg Leu Ser Arg Thr Cys His Trp Ser Leu Gln Pro

Pro His Pro Pro Arg Arg Ala Ser Gly Trp Ala Ala Ser Leu Gly Arg

Ala Ala Val Pro Ala Arg Ala Arg Leu Ala Ser Leu Val Arg Ala Gly

Ser Ala Gly Arg Ala Arg Leu Arg Gly Ala Ala Leu Glu Glu Thr Glu 100 105

Ala Ala Gly Gly Pro Glu Ala Gln Glu Glu Asp Glu Asp Glu Glu Glu 115 120

Ala Leu Pro His Ser Glu Ala Met Asp Val Phe Gln Glu Gly Leu Ala 130

Met Val Val Gln Asp Pro Leu Leu Cys Asp Leu Pro Ile Gln Val Thr 150 155

Leu Glu Glu Val Asn Ser Gln Ile Ala Leu Glu Tyr Gly Gln Ala Met 165 170 175

Thr Val Arg Val Cys Lys Met Asp Gly Glu Val Met Pro Val Val Val 180 185 190

Val Gln Ser Ala Thr Val Leu Asp Leu Lys Lys Ala Ile Gln Arg Tyr 195 200 205

Val Gln Leu Lys Gln Glu Arg Glu Gly Gly Ile Gln His Ile Ser Trp 210 215 220

<210> 177

<211> 300

<212> PRT

<213> Homo sapien

<400> 177

Met Val Ser Asn Ser Ala Gly Ser Asn Ser Arg Gln Leu Pro Leu Pro 1 5 10 15

Leu Ser Ala Asp Ala Pro Pro Ala Ser Ser Ser His Trp Ser Trp Gln 20 25 30

Pro Ser Arg His Thr Asn Gln Pro Ile Asp Arg Ala Ile Leu Arg Ser 35 40 45

Arg Pro Cys Cys Arg Leu Ser Arg Thr Cys His Trp Ser Leu Gln Pro 50 55 60

Pro His Pro Pro Arg Arg Ala Ser Gly Trp Ala Ala Ser Leu Gly Arg 65 70 75 80

Ala Ala Val Pro Ala Arg Ala Arg Leu Ala Ser Leu Val Arg Ala Gly 85 90 95

Ser Ala Gly Arg Ala Arg Leu Arg Gly Ala Ala Leu Glu Glu Thr Glu 100 105 110

Ala Ala Gly Gly Pro Glu Ala Gln Glu Glu Asp Glu Asp Glu Glu Glu 115 120 125

Ala Leu Pro His Ser Glu Ala Met Asp Val Phe Gln Glu Gly Leu Ala 130 135 140

Met Val Val Gln Asp Pro Leu Leu Cys Asp Leu Pro Ile Gln Val Thr 145 150 155 160

Leu Glu Glu Val Asn Ser Gln Ile Ala Leu Glu Tyr Gly Gln Ala Met 165 170 175

Thr Val Arg Val Cys Lys Met Asp Gly Glu Val Met Arg Lys Cys Tyr 180 185 190

Pro Pro Pro Phe Arg Phe Met Trp Ser Arg Leu Ser Gln Gln Glu Asp 195 200 205

Leu Thr Val Leu Val Ser Leu Leu Arg Asn Ser Gln Ala Met Pro Arg 210 215 220

Gly Thr Gly Ala Thr Thr Asn Leu Pro Cys Ala Gln Arg Cys Trp Phe 225 230 235 240

Leu Ser Cys His Arg Arg Leu Trp Leu Trp Val Leu Thr Met Asp Leu 245 250 255

Leu Pro Ser Val Ser Val Val Ala Ala Val Val Val Gln Ser Ala 260 265 270

Thr Val Leu Asp Leu Lys Lys Ala Ile Gln Arg Tyr Val Gln Leu Lys 275 280 285

Gln Glu Arg Glu Gly Gly Ile Gln His Ile Ser Trp 290 295 300

<210> 178

<211> 236

<212> PRT

<213> Homo sapien

<400> 178

Gly His Val Leu Gln Ala Lys Arg Trp Gln Arg Cys Pro Ser Ser Thr 1 5 10 15

Ile Ser Pro Phe Pro Gln Pro Gly Gln Asn Ser Ser Met Val Ser Asn 20 25 30

Ser Ala Gly Ser Asn Ser Arg Gln Leu Pro Leu Pro Leu Ser Ala Asp 35 40 45

Ala Pro Pro Ala Ser Ser Ser His Trp Ser Trp Gln Pro Ser Arg His 50 55 60

Thr Asn Gln Pro Ile Asp Arg Ala Ile Leu Arg Ser Arg Pro Cys Cys

Arg Leu Ser Arg Thr Cys His Trp Ser Leu Gln Pro Pro His Pro Pro

Arg Arg Ala Ser Gly Trp Ala Ala Ser Leu Gly Arg Ala Ala Val Pro 105

Ala Arg Ala Arg Leu Ala Ser Leu Val Arg Ala Gly Ser Ala Gly Arg

Ala Arg Leu Arg Gly Ala Ala Leu Glu Glu Thr Glu Ala Ala Gly Gly

Pro Glu Ala Gln Glu Glu Asp Glu Glu Glu Glu Ala Leu Pro His 155

Ser Glu Ala Met Asp Val Phe Gln Glu Gly Leu Ala Met Val Val Gln 165 170

Asp Pro Leu Leu Cys Asp Leu Pro Ile Gln Val Thr Leu Glu Glu Val 180 185

Asn Ser Gln Ile Ala Leu Glu Tyr Gly Gln Ala Met Thr Val Arg Val 195 200

Cys Lys Met Asp Gly Glu Val Met Arg Lys Cys Tyr Pro Pro Pro Phe 210

Arg Leu Cys Gly Pro Gly Phe His Ser Arg Lys Thr 225 235

<210> 179 <211> 143 <212> PRT

<213> Homo sapien

Met Pro Ala Tyr Thr Ala Thr Ala Gly Thr Leu Arg Asp Thr Gln Leu 5

His Thr His Ile Ala Val His Asn Pro Thr Tyr Asn Gln Lys Thr Lys 20

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223

His Glu Thr Phe Pro Trp Ala Leu Asn Pro His Val Asn Val His Thr 35 40 45

Gln Thr His Ala Leu Leu Ser His Phe Leu Phe His Thr Pro Ser Ser 50 55 60

Arg Pro Pro Thr Pro Asp Phe Arg His Pro Gln Ser Gln Ser Glu Leu 65 70 75 80

Ala Pro Ala Gln Pro Ser Leu Asp Thr His Ala Pro Pro Thr His Ala 85 90 95

Leu Pro Ser Pro Ala Gly Gly Gly Phe Gly Arg Glu Pro Ala Glu
100 105 110

Pro Ala Ser Asp Ser Arg Cys Gly Ser Asp Ser Ala Leu His Val Leu 115 120 125

Gln Ala Ala Thr Val Ser Glu Ala Arg Arg Gly Arg Glu Leu Glu 130 135 140

<210> 180

<211> 126

<212> PRT

<213> Homo sapien

<400> 180

Ala His Phe Gly Ser Arg Pro Leu Pro Leu Ser Arg Lys Leu Leu Gln 1 5 10 15

Glu Arg His Thr Arg Ser Leu Pro Gln His Cys Lys His Ala Pro Pro 20 25 30

Gln Thr Thr Asn Ala Pro Pro His Thr Arg Leu Leu Ser Leu Thr Lys 35 40 45

Met Pro Ala Tyr Thr Ala Thr Ala Gly Thr Leu Arg Asp Thr Gln Leu 50 55 60

His Thr His Ile Ala Val His Asn Pro Thr Tyr Asn Gln Lys Thr Lys 65 70 75 80

His Glu Thr Phe Pro Trp Ala Leu Asn Pro His Val Asn Val His Thr 85 90 95

Gln Thr His Ala Leu Leu Ser His Phe Leu Phe His Thr Pro Ser Ser 100 105 110

224

Arg Pro Pro Thr Pro Asp Phe Arg His Pro Gln Ser Gln Ser 120

<210> 181

<211> 116

<212> PRT

<213> Homo sapien

<400> 181

Ser Ser Ser Ala Cys His Pro Gly Ser Ser Gly Gly Ile Ala Leu

Lys Ile Cys Pro Ile Val Lys Gln Glu His Trp Asn Leu His Ser Thr

Ile Arg Pro Cys His Arg Arg Thr Lys Lys Glu Gly Arg Gly Asp His

Ala Pro Ala Ser Arg Glu Ser Pro Phe Phe Ser Ala Ser Tyr Leu Gly

Lys Tyr Lys Gly Val Arg Ala Gly Thr Thr Ser Gln Arg Val His Gly 75

Gly Ser Gly Arg Gly Arg Trp Val Leu His Gly Ala Thr Pro Gly Thr

Phe Leu Leu Ser His Ser Leu Thr Ile Thr Ser Ser Cys Ser Gln Ser 100 105

His Ser His Gln 115

<210> 182 <211> 77 <212> PRT

<213> Homo sapien

<400> 182

Lys Pro His Ser Leu Arg Lys Pro Ser Ser Lys Ala Asn Ile Leu Val

Ile Cys Glu Lys Ile Glu His Ser Val Ser Leu Leu Ser Ala Ser

Gln His Leu Leu Glu Gln His Glu Leu Leu Thr Leu Thr His Lys Ser

35

. 40

Pro Thr Leu Ile Ser Pro Thr Gly Glu Phe Gly Gly Leu Tyr Cys His

Val Pro Gly Ile Ile Ile Cys Ser Ser Leu Tyr Glu Glu

<210> 183

<211> 115 <212> PRT

<213> Homo sapien

<400> 183

Leu Val Phe His Phe Leu Ser Glu Thr Leu Asp Asn Ile Phe Ile Phe

Tyr Leu Val Ser Ile Phe Gln Phe Ser Ser Lys Phe Val His Phe Ala

Leu Ser Phe Leu Phe Pro Ser Leu Ser Phe Phe Phe Cys Phe Leu Leu 35 40

Phe Arg Phe Lys Phe Ile Phe Phe Leu Leu Lys Val Cys Phe Tyr Leu 50 55

Leu Ile Ser Leu Ser Ser Leu Phe Phe Ser Ser Pro Ser Arg Thr Ser 65 70 75 80

Val Phe Gln Phe Ser Thr Ser Asn Phe Tyr Leu Leu Gln Ile Val Ser 90 . 95

Ser Tyr His Ser Gln Leu Ile Phe Pro Phe Ser Ser Ala Phe Ser Lys 100 105 110

Cys Val Asn 115

<210> 184

<211> 84 <212> PRT

<213> Homo sapien

<220>

<221> MISC_FEATURE

<222> (77)..(78) <223> X=any amino acid

226

<220>

<221> MISC_FEATURE

<222> (82)..(82)

<223> X=any amino acid

<400> 184

Lys Pro His Ser Leu Arg Lys Pro Ser Ser Lys Ala Asn Ile Leu Val

Ile Cys Glu Lys Ile Glu His Ser Val Ser Leu Leu Ser Ala Ser

Gln His Leu Leu Glu Gln His Glu Leu Leu Thr Leu Thr His Lys Ser

Pro Thr Leu Ile Ser Pro Thr Gly Glu Phe Gly Gly Leu Tyr Cys His

Val Pro Gly Ile Ile Ile Cys Ser Ser Leu Tyr Glu Xaa Xaa Asn Leu

Ser Xaa Leu Pro

<210> 185

<211> 84

<212> PRT

<213> Homo sapien

<220>

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<222> (77)..(78) <223> X=any amino acid

<220>

<221> MISC_FEATURE

<222> (82)..(82)

<223> X=any amino acid

<400> 185

Lys Pro His Ser Leu Arg Lys Pro Ser Ser Lys Ala Asn Ile Leu Val 5 10

Ile Cys Glu Lys Ile Glu His Ser Val Ser Leu Leu Leu Ser Ala Ser 20

Gln His Leu Leu Glu Gln His Glu Leu Leu Thr Leu Thr His Lys Ser 35

227

Pro Thr Leu Ile Ser Pro Thr Gly Glu Phe Gly Gly Leu Tyr Cys His

Val Pro Gly Ile Ile Cys Ser Ser Leu Tyr Glu Xaa Xaa Asn Leu

Ser Xaa Leu Pro

<210> 186

<211> 104 <212> PRT

<213> Homo sapien

<400> 186

Met Val Leu Cys Lys Ile Lys Gln His Val Glu Gly Ile Val Ser Ala

Trp Trp Leu Leu Glu Pro Pro Glu Arg Cys Cys Gly Ser Ser Thr Ser

Ala Thr Asn Ser Thr Ser Val Ser Ser Arg Lys Ala Glu Asn Lys Tyr

Ala Gly Gly Asn Pro Val Cys Val Arg Pro Thr Pro Lys Trp Gln Lys

Gly Ile Gly Glu Phe Phe Arg Leu Ser Pro Lys Asp Ser Glu Lys Glu

Asn Gln Ile Pro Glu Glu Ala Gly Ser Ser Gly Leu Gly Lys Ala Lys

Arg Lys Ala Cys Pro Cys Ala Thr 100

<210> 187 <211> 107 <212> PRT

<213> Homo sapien

<400> 187

Asn Lys Thr Ala Arg Gly Arg Tyr Cys Lys Arg Leu Val Ala Ala Arg 10

Ala Pro Arg Lys Val Leu Gly Ser Ser Thr Ser Ala Thr Asn Ser Thr

228

20 25 30

Ser Val Ser Ser Arg Lys Ala Glu Asn Lys Tyr Ala Gly Gly Asn Pro

Val Cys Val Arg Pro Thr Pro Lys Trp Gln Lys Gly Ile Gly Glu Phe 50 55 60

Phe Arg Leu Ser Pro Lys Asp Ser Glu Lys Glu Asn Gln Ile Pro Glu 70

Glu Ala Gly Ser Ser Gly Leu Gly Lys Ala Lys Arg Lys Ala Cys Pro 90

Leu Gln Pro Asp His Thr Asn Asp Glu Lys Glu 105

<210> 188

<211> 38 <212> PRT <213> Homo sapien

<220>

<221> MISC_FEATURE

<222> (12)..(12)

<223> X=any amino acid

<400> 188

Pro Pro Pro Arg Leu Leu Ile Tyr Lys Gly Gln Xaa Val Ile Leu Asp 5

Ala Ala Arg Ala Ala Gln Cys Asp Gly Leu Val Ala Ala Glu Val Pro 25

Asp Tyr Asn Ala Arg Ile 35

<210> 189

<211> 47 <212> PRT

<213> Homo sapien

<400> 189

Ile Phe Val Leu Ile Asn Leu Val Asn Lys Asn Lys Ser Lys Ser Glu

Lys Lys Thr Thr Gln Lys Lys Val Gly Gly Asn Gln Gly Pro Lys 25

Gly Ser Leu Cys Asp Leu Val Phe Arg Pro Ile Pro Gln Val Gly

<210> 190 <211> 71 <212> PRT <213> Homo sapien

<400> 190

Met Leu Leu Glu Arg Arg Ser Val Asp Gly Ser Trp Ser Arg Pro Arg 5

Tyr Ile Asp Phe Thr Ala Asp Gln Val Asp Leu Thr Ser Ala Leu Thr

Lys Lys Ile Thr Leu Lys Thr Pro Leu Val Ser Ser Pro Met Asp Thr 40

Val Thr Glu Ala Gly Met Ala Ile Ala Met Ala Leu Thr Gly Gly Ile

Gly Phe Ile His His Asn Ser

<210> 191

<211> 138 <212> PRT <213> Homo sapien

<400> 191

Met Pro Ile Thr Ser Thr Ser Pro Val Glu Pro Val Val Thr Thr Glu 10

Gly Ser Ser Gly Ala Ala Gly Leu Glu Pro Arg Lys Leu Ser Ser Lys 20

Thr Arg Arg Asp Lys Glu Lys Gln Ser Cys Lys Ser Cys Gly Glu Thr

Phe Asn Ser Ile Thr Lys Arg Arg His His Cys Lys Leu Cys Gly Ala

Val Ile Cys Gly Lys Cys Ser Glu Phe Lys Ala Glu Asn Ser Arg Gln

Ser Arg Val Cys Arg Asp Cys Phe Leu Thr Gln Pro Val Ala Pro Glu

230

90 85 95

Ser Thr Glu Val Gly Ala Pro Ser Ser Cys Ser Pro Pro Gly Gly Ala 100 105 110

Ala Glu Pro Pro Asp Thr Cys Ser Cys Ala Pro Ala Ala Leu Ala Ala 115 120 125

Ser Ala Phe Gly Val Ser Leu Gly Pro Gly 130 135

<210> 192

<211> 67 <212> PRT

<213> Homo sapien

<400> 192

Ser Arg Gly Ser Arg Leu Pro Ser Asn Phe Pro Ser Asp Leu Tyr Ser 10 15

Leu Ala His Ser Tyr Leu Gly Gly Gly Arg Lys Gly Arg Thr Lys 25 30

Arg Glu Ala Ala Asa Thr Asa Arg Pro Ser Pro Gly Gly His Glu 35 40

Arg Lys Leu Val Thr Lys Leu Gln Asn Ser Glu Arg Lys Lys Arg Gly 50 55 60

Ala Arg Arg 65

<210> 193

<211> 65

<212> PRT

<213> Homo sapien

<220>

<221> MISC_FEATURE

<222> (10)..(10) <223> X=any amino acid

<220>

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<222> (13)..(13)

<223> X=any amino acid

<400> 193

231

Leu Glu Asp Leu Gly Cys Leu Ala Leu Xaa Ser Asp Xaa Ile Ala Gly 10

His Ser Tyr Leu Gly Gly Gly Gly Arg Lys Gly Arg Thr Lys Arg Glu

Ala Ala Ala Asn Thr Asn Arg Pro Ser Pro Gly Gly His Glu Arg Lys

Leu Val Thr Lys Leu Gln Asn Ser Glu Arg Lys Lys Arg Gly Ala Arg

Arg 65

<210> 194 <211> 195

<212> PRT

<213> Homo sapien

<400> 194

Met Gly Ser His Tyr Val Ser Gln Ala Asp Pro Lys Phe Leu Gly Ser

Ser Asn Ser Pro Ala Leu Ala Ser Gln Ser Ala Glu Ile Thr Gly Val 20 25

Ser His Pro Ala Gln Pro Thr His Pro Phe Leu Ala Asn Leu Phe Leu

Gly Pro Ser Arg His Pro Cys Leu Ile Pro Tyr Pro Arg Ser Ala Met

Leu Leu Ser Leu Gly Pro His Thr His Leu Gly Ser His Ile Pro Gln

Arg Gly Ser Ser Arg Leu Leu Pro Ala Leu Pro Ile Pro Thr Thr Leu

Asn Pro Cys Leu Ser Ser Asp Arg Ala Ser His His Ala Tyr Ala His 100 105

Phe Thr Ser Asp Ser Cys Leu Gly Tyr Arg Arg Trp Arg Pro Glu Arg 120

Ser His Gln Glu Arg Ser Cys Cys Gln His Gln Pro Pro Gln Pro Trp 130 135

Arg Ala Arg Glu Glu Thr Gly Asp Gln Ala Ala Glu Phe Arg Glu Glu 155

Glu Ala Arg Gly Thr Ala Leu Arg Gln Ser Trp Arg Val Arg Ser Arg

Gly Ala Gln Arg Ala Gln Gly Gly Ala Ser Ala Met Lys Asp Arg Pro 185

Glu Gly Val 195

<210> 195 <211> 124 <212> PRT <213> Homo sapien

<400> 195

Trp Met Trp Ser Arg Pro Arg Trp Gly Ala Glu Phe Arg Lys Ile Pro

Thr Ser Met Lys Ala Lys Arg Ser His Gln Ala Ile Ile Met Ser Thr 20

Ser Leu Arg Val Ser Pro Ser Ile His Gly Tyr His Phe Asp Thr Ala 40

Ser Arg Lys Lys Ala Val Gly Asn Ile Phe Glu Asn Thr Asp Gln Glu

Ser Leu Glu Arg Leu Phe Arg Asn Ser Gly Asp Lys Lys Ala Glu Glu

Arg Ala Lys Ile Ile Phe Ala Ile Asp Gln Asp Val Glu Glu Lys Thr

Arg Ala Leu Met Ala Leu Lys Lys Arg Thr Lys Asp Lys Leu Phe Gln 105

Phe Leu Lys Leu Arg Lys Tyr Ser Ile Lys Val His 115 120

<210> 196 <211> 106 <212> PRT <213> Homo sapien

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233

<400> 196

Met Lys Ala Lys Arg Ser His Gln Ala Ile Ile Met Ser Thr Ser Leu 1 5 10 15

Arg Val Ser Pro Ser Ile His Gly Tyr His Phe Asp Thr Ala Ser Arg

Lys Lys Ala Val Gly Asn Ile Phe Glu Asn Thr Asp Gln Glu Ser Leu 35 40 45

Glu Arg Leu Phe Arg Asn Ser Gly Asp Lys Lys Ala Glu Glu Arg Ala
50 55 60

Lys Ile Ile Phe Ala Ile Asp Gln Asp Val Glu Glu Lys Thr Arg Ala 65 70 75 80

Leu Met Ala Leu Lys Lys Arg Thr Lys Asp Lys Leu Phe Gln Phe Leu 85 90 95

Lys Leu Arg Lys Tyr Ser Ile Lys Val His
100 105

<210> 197

<211> 129

<212> PRT

<213> Homo sapien

<400> 197

Met Leu Leu Glu Arg Arg Ser Val Met Asp Gly Gln Val Lys Gly Ala 1 5 10 15

Glu Phe Arg Lys Ile Pro Thr Ser Met Lys Ala Lys Arg Ser His Gln
20 25 30

Ala Ile Ile Met Ser Thr Ser Leu Arg Val Ser Pro Ser Ile His Gly 35 40

Tyr His Phe Asp Thr Ala Ser Arg Lys Lys Ala Val Gly Asn Ile Phe 50 60

Glu Asn Thr Asp Gln Glu Ser Leu Glu Arg Leu Phe Arg Asn Ser Gly 70 75 80

Asp Lys Lys Ala Glu Glu Arg Ala Lys Ile Ile Phe Ala Ile Asp Gln 85 90 95

234

Asp Val Glu Glu Lys Thr Arg Ala Leu Met Ala Leu Lys Lys Arg Thr 105

Lys Cys Phe Gln Gln Gly Phe Glu Asn Ser Ser Val Pro Ala Gly Lys

Asp

<210> 198

<211> 130 <212> PRT <213> Homo sapien

<400> 198

Met Leu Leu Glu Arg Arg Ser Val Met Asp Gly Gln Val Ser Leu Gly 10

Ala Glu Phe Arg Lys Ile Pro Thr Ser Met Lys Ala Lys Arg Ser His

Gln Ala Ile Ile Met Ser Thr Ser Leu Arg Val Ser Pro Ser Ile His 35

Gly Tyr His Phe Asp Thr Ala Ser Arg Lys Lys Ala Val Gly Asn Ile 50 55

Phe Glu Asn Thr Asp Gln Glu Ser Leu Glu Arg Leu Phe Arg Asn Ser 70 75

Gly Asp Lys Lys Ala Glu Glu Arg Ala Lys Ile Ile Phe Ala Ile Asp 85 90

Gln Asp Val Glu Glu Lys Thr Arg Ala Leu Met Ala Leu Lys Lys Arg

Thr Lys Cys Phe Gln Gln Gly Phe Glu Asn Ser Ser Val Pro Ala Gly 115 120

Lys Asp 130

<210> 199 <211> 85 <212> PRT

<213> Homo sapien

WO 2004/053077 PCT/US2003/038815

235

<400> 199

Ile Leu Cys Asp Met Ile Phe Trp Ile Tyr Arg Thr Leu Ala His Val 1 5 10 15

Pro Cys Ala Ser His Ser Ser Glu Val Ile Ile Tyr Thr Glu Gly Phe 20 25 30

Lys Ile Arg Leu Glu Val Glu Ile Tyr Tyr Leu Phe Met His Cys Thr 35 40 45

Val Phe Leu Tyr Cys Cys Leu Lys Leu Leu Ser Cys Ala Ser Leu Ile 50 55 60

Lys Ala Gln Asn Val Leu Pro Thr Pro Tyr Leu Arg Arg Asn Lys Ile 65 70 75 80

Thr Ser Ile Asp Phe

<210> 200

<211> 68

<212> PRT

<213> Homo sapien

<400> 200

Asp Ala Cys Arg Ala Gly Arg Ser Val Asp Gly Tyr Lys Ala Val Arg

1 10 15

Phe Ser Ser Pro Ser Arg Ala Leu Leu Gly Thr Arg Glu Ile Trp Leu 20 25 30

Trp Ser Arg Trp Ser Ser Leu Thr Pro His Arg Ala Asn Leu Asn Leu 35 40 45

Val Leu Glu Lys Ala Phe Ser Asn Ser Thr Pro Pro Tyr Lys Met His 50 55 60

Met Glu Val Gly

<210> 201

<211> 378

<212> PRT

<213> Homo sapien

<400> 201

Ser Ala Val Gly Ser Asp His Ile Phe His Asn Ile Pro Gly Ser Thr

236 1 5 10 15 Ser Ser Ala Thr Asn Val Ser Met Val Val Ser Ala Gly Pro Trp Ser Ser Glu Lys Ala Glu Thr Asn Ile Leu Glu Ile Asn Glu Lys Leu Arg 35 40 Pro Gln Leu Ala Glu Asn Lys Gln Gln Phe Arg Asn Leu Lys Glu Lys 55 Cys Phe Val Thr Gln Leu Ala Gly Phe Leu Ala Asn Arg Gln Lys Lys Tyr Lys Tyr Glu Glu Cys Lys Asp Leu Ile Lys Phe Met Leu Arg Asn Glu Arg Gln Phe Lys Glu Glu Lys Leu Ala Glu Gln Leu Lys Gln Ala 105 Glu Glu Leu Arg Gln Tyr Lys Val Leu Val His Ser Gln Glu Arg Glu Leu Thr Gln Leu Arg Glu Lys Leu Arg Glu Gly Arg Asp Ala Ser Arg 135 Ser Leu Asn Gln His Leu Gln Ala Leu Leu Thr Pro Asp Glu Pro Asp Lys Ser Gln Gly Gln Asp Leu Gln Glu Gln Leu Ala Glu Gly Cys Arg Leu Ala Gln His Leu Val Gln Lys Leu Ser Pro Glu Asn Asp Asn Asp 185 Asp Asp Glu Asp Val Gln Val Glu Val Ala Glu Lys Val Gln Lys Ser Ser Ala Pro Arg Glu Met Pro Lys Ala Glu Glu Lys Glu Val Pro Glu 210 215 220 Asp Ser Leu Glu Glu Cys Ala Ile Thr Cys Ser Asn Ser His Gly Pro 225 230

Tyr Asp Ser Asn Gln Pro His Arg Lys Thr Lys Ile Thr Phe Glu Glu

245

Asp Lys Val Asp Ser Thr Leu Ile Gly Ser Ser Ser His Val Glu Trp 265

Glu Asp Ala Val His Ile Ile Pro Glu Asn Glu Ser Asp Asp Glu Glu 280

Glu Glu Glu Lys Gly Pro Val Ser Pro Arg Asn Leu Gln Glu Ser Glu 295

Glu Glu Glu Val Pro Gln Glu Ser Trp Asp Glu Gly Tyr Ser Thr Leu

Ser Ile Pro Pro Glu Met Leu Ala Ser Tyr Gln Ser Tyr Ser Gly Thr 330

Phe His Ser Leu Glu Glu Gln Gln Val Cys Met Ala Val Asp Ile Gly 345

Gly His Arg Trp Asp Gln Val Lys Lys Glu Asp Gln Glu Ala Thr Gly

Pro Ser Gln Ala Gln Gln Gly Ala Ala Gly 370 375

<210> 202

<211> 876

<212> PRT

<213> Homo sapien

<400> 202

Met Gly Asn Ser Lys Lys Asn Thr Glu Thr Gly Lys Thr Thr Phe Phe

Thr Asn Glu Leu Phe Ile His Phe Gln Trp Ile Gln Thr Lys Leu Gln

Lys Thr Gln Arg Lys Ser Gly Gln Ala Lys Ser Leu Ile Ser Tyr Thr

Cys Gly Lys Ala Leu Ser Ser Val Leu Thr Glu Ser Arg Trp Gly Asp 50

Phe Met Thr Thr Ile Lys Lys Ile Gln Leu Leu Gly Asn Cys Phe Cys 70

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Leu Asp Asp Val Val Gln Thr Arg Asp Lys Gln Leu Arg Asn Met Leu 85 90 95

Arg Cys Ile Gly Lys Asp Thr Gly Leu Trp His His Lys Gly Thr
100 105 110

Arg Ile Leu Arg Val Asn Ala Glu Gly Met Ile Pro Ile Gly Gly Asp 115 120 125

Pro Gln Val Arg Leu Gly Cys Leu Cys Phe Arg Lys Ala Trp Ala Ile 130 135 140

Gly Met Gln Gly Ser Tyr Asp Ser Met Thr Pro Pro Pro Ser Asn Ser 145 150 155 160

Val Ile Ala Thr Ala Asp Gly Tyr Leu Ala Arg Trp Pro Gln Ser Thr 165 170 175

Ser Leu Leu Ser Glu Ser Glu Leu Leu Ala Val Leu Ser Ala Leu Ser 180 185 190

Ser Gly Thr Ser Asn Leu Val Phe Val Val Lys Asp Pro Lys Val Leu 195 200 205

Trp Gly Val Ile Thr Phe Phe Tyr Asn Ile Pro Gly Ser Thr Ser Ser 210 215 220

Ala Thr Asn Val Ser Met Val Val Ser Ala Gly Pro Trp Ser Ser Glu 225 230 235 240

Lys Ala Glu Thr Asn Ile Leu Glu Ile Asn Glu Lys Leu Arg Pro Gln 245 250 255

Leu Ala Glu Asn Lys Gln Gln Phe Arg Asn Leu Lys Glu Lys Cys Phe 260 265 270

Val Thr Gln Leu Ala Gly Phe Leu Ala Asn Arg Gln Lys Lys Tyr Lys 275 280 285

Tyr Glu Glu Cys Lys Asp Leu Ile Lys Phe Met Leu Arg Asn Glu Arg 290 295 300

Gln Phe Lys Glu Glu Lys Leu Ala Glu Gln Leu Lys Gln Ala Glu Glu 305 310 315 320

Leu Arg Gln Tyr Lys Val Leu Val His Ser Gln Glu Arg Glu Leu Thr

325 330

335 Gln Leu Arg Glu Lys Leu Arg Glu Gly Arg Asp Ala Ser Cys Ser Leu 340 345 Asn Gln His Leu Gln Ala Leu Leu Thr Pro Asp Glu Pro Asp Lys Ser Gln Gly Gln Asp Leu Gln Glu Gln Leu Ala Glu Gly Cys Arg Leu Ala 370 380 Gln His Leu Val Gln Lys Leu Ser Pro Glu Asn Asp Asn Asp Asp 390 395 Glu Asp Val Gln Val Glu Val Ala Glu Lys Val Gln Lys Ser Ser Ala 405 Pro Arg Glu Met Pro Lys Ala Glu Glu Lys Glu Val Pro Glu Asp Ser 420 Leu Glu Glu Cys Ala Ile Thr Cys Ser Asn Ser His Gly Pro Tyr Asp 440 Ser Asn Gln Pro His Arg Lys Thr Lys Ile Thr Phe Glu Glu Asp Lys Val Asp Ser Thr Leu Ile Gly Ser Ser Ser His Val Glu Trp Glu Asp 470 475 Ala Val His Ile Ile Pro Glu Asn Glu Ser Asp Asp Glu Glu Glu Glu 485 490 Glu Lys Gly Pro Val Ser Pro Arg Asn Leu Gln Glu Ser Glu Glu Glu 500 505 Glu Val Pro Gln Glu Ser Trp Asp Glu Gly Tyr Ser Thr Leu Ser Ile 520 Pro Pro Glu Met Leu Ala Ser Tyr Gln Ser Tyr Ser Gly Thr Phe His 530 Ser Leu Glu Glu Gln Gln Val Cys Met Ala Val Asp Ile Gly Gly His 555 Arg Trp Asp Gln Val Lys Lys Glu Asp Gln Glu Ala Thr Gly Pro Ser 565

570

Gln	Leu	Ser	Arg 580	Glu	Leu	Leu	Asp	Glu 585	ГÀв	Gly	Pro	Glu	Val 590	Leu	Gln
Asp	Ser	Leu 595	Asp	Arg	Сув	Tyr	Ser 600	Thr	Pro	Ser	Gly	Tyr 605	Leu	Glu	Leu
Thr	Asp 610	Ser	Сув	Gln	Pro	Tyr 615	Arg	Ser	Ala	Phe	Tyr 620	Ile	Leu	Glu	Gln
Gln 625	Arg	Val	Gly	Trp	Ala 630	Leu	Asp	Met	Asp	Glu 635	Ile	Glu	Lys	Tyr	Gln 640
Glu	Val	Glu	Glu	Asp 645	Gln	Asp	Pro	Ser	Сув 650	Pro	Arg	Leu	Ser	Arg 655	Glu
Leu	Leu	Asp	Glu 660	Lys	Glu	Pro	Glu	Val 665	Leu	Gln	Asp	Ser	Leu 670	Asp	Arg
Сув	Tyr	Ser 675	Thr	Pro	Ser	Gly	Туг 680	Leu	Glu	Leu	Pro	Asp 685	Leu	Gly	Gln
Pro	Tyr 690	Arg	Ser	Ala	Val	His 695	Ser	Leu	Glu	Glu	Gln 700	Tyr	Leu	Gly	Leu
Ala 705	Leu	Asp	Val	Asp	Arg 710	Ile	ГÀЗ	Lys	Asp	Gln 715	Glu	Glu	Glu	Glu	Asp 720
Gln	Gly	Pro	Pro	Сув 725	Pro	Arg	Leu	Ser	Arg 730	Glu	Leu	Leu	Glu	Ala 735	Val
Glu	Pro	Glu	Val 740	Leu	Gln	Asp	Ser	Leu 745	Asp	Arg	Сув	Tyr	Ser 750	Thr	Pro
Ser	Ser	Сув 755	Leu	Glu	Gln	Pro	Asp 760	Ser	Сув	Leu	Pro	Tyr 765	Gly	Ser	Ser
Phe	Tyr 770	Ala	Leu	Glu	Glu	Lys 775	His	Val	Gly	Phe	Ser 780	Leu	Asp	Val	Gly
Glu 785	Ile	Glu	Lys	Lys	Gly 790	Lys	Gly	Lys	Lys	Arg 795	Arg	Gly	Arg	Arg	Ser 800
Thr	ГÀв	Lys	Arg	Arg 805	Arg	Arg	Gly	Arg	Lys 810	Glu	Gly	Glu	Glu	Asp 815	Gln

Asn Pro Pro Cys Pro Arg Leu Ser Arg Glu Leu Leu Asp Glu Lys Gly 820 825

Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser

Gly Tyr Leu Glu Leu Thr Asp Ser Cys Gln Pro Tyr Arg Ser Ala Phe 850

Tyr Leu Leu Glu Gln Gln Arg Val Glu Leu Arg Pro 870

<210> 203

<211> 378 <212> PRT <213> Homo sapien

<400> 203

Ser Ala Val Gly Ser Asp His Ile Phe His Asn Ile Pro Gly Ser Thr

Ser Ser Ala Thr Asn Val Ser Met Val Val Ser Ala Gly Pro Trp Ser 25

Ser Glu Lys Ala Glu Thr Asn Ile Leu Glu Ile Asn Glu Lys Leu Arg 35 40

Pro Gln Leu Ala Glu Asn Lys Gln Gln Phe Arg Asn Leu Lys Glu Lys 50 55

Cys Phe Val Thr Gln Leu Ala Gly Phe Leu Ala Asn Arg Gln Lys Lys 65 80

Tyr Lys Tyr Glu Glu Cys Lys Asp Leu Ile Lys Phe Met Leu Arg Asn 90

Glu Arg Gln Phe Lys Glu Glu Lys Leu Ala Glu Gln Leu Lys Gln Ala

Glu Glu Leu Arg Gln Tyr Lys Val Leu Val His Ser Gln Glu Arg Glu 115 120

Leu Thr Gln Leu Arg Glu Lys Leu Arg Glu Gly Arg Asp Ala Ser Arg

Ser Leu Asn Gln His Leu Gln Ala Leu Leu Thr Pro Asp Glu Pro Asp

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145 150 155 160

Lys Ser Gln Gly Gln Asp Leu Gln Glu Gln Leu Ala Glu Gly Cys Arg 165 170 175

Leu Ala Gln His Leu Val Gln Lys Leu Ser Pro Glu Asn Asp Asn Asp 180 185 190

Asp Asp Glu Asp Val Gln Val Glu Val Ala Glu Lys Val Gln Lys Ser 195 200 205

Ser Ala Pro Arg Glu Met Pro Lys Ala Glu Glu Lys Glu Val Pro Glu 210 215 220

Asp Ser Leu Glu Glu Cys Ala Ile Thr Cys Ser Asn Ser His Gly Pro 225 230 235 240

Tyr Asp Ser Asn Gln Pro His Arg Lys Thr Lys Ile Thr Phe Glu Glu 245 250 255

Asp Lys Val Asp Ser Thr Leu Ile Gly Ser Ser Ser His Val Glu Trp 260 265 270

Glu Asp Ala Val His Ile Ile Pro Glu Asn Glu Ser Asp Asp Glu Glu 275 280 285

Glu Glu Lys Gly Pro Val Ser Pro Arg Asn Leu Gln Glu Ser Glu 290 295 300

Glu Glu Glu Val Pro Gln Glu Ser Trp Asp Glu Gly Tyr Ser Thr Leu 305 310 315 320

Ser Ile Pro Pro Glu Met Leu Ala Ser Tyr Gln Ser Tyr Ser Gly Thr 325 330 335

Phe His Ser Leu Glu Glu Gln Gln Val Cys Met Ala Val Asp Ile Gly 340 345 350

Gly His Arg Trp Asp Gln Val Lys Lys Glu Asp Gln Glu Ala Thr Gly 355 360 365

Pro Ser Gln Ala Gln Gln Gly Ala Ala Gly 370 375

<210> 204 <211> 782

<212> PRT

<213> Homo sapien

<400> 204

Met Leu Arg Cys Ile Gly Lys Asp Thr Gly Leu Trp His His Lys

1 10 15

Gly Thr Arg Ile Leu Arg Val Asn Ala Glu Gly Met Ile Pro Ile Gly
20 25 30

Gly Asp Pro Gln Val Arg Leu Gly Cys Leu Cys Phe Arg Lys Ala Trp 35 40 45

Ala Ile Gly Met Gln Gly Ser Tyr Asp Ser Met Thr Pro Pro Pro Ser 50 55 60

Asn Ser Val Ile Ala Thr Ala Asp Gly Tyr Leu Ala Arg Trp Pro Gln 65 70 75 80

Ser Thr Ser Leu Leu Ser Glu Ser Glu Leu Leu Ala Val Leu Ser Ala 85 90 95

Leu Ser Ser Gly Thr Ser Asn Leu Val Phe Val Val Lys Asp Pro Lys
100 105 110

Val Leu Trp Gly Val Ile Thr Phe Phe Tyr Asn Ile Pro Gly Ser Thr 115 120 125

Ser Ser Ala Thr Asn Val Ser Met Val Val Ser Ala Gly Pro Trp Ser 130 135 140

Ser Glu Lys Ala Glu Thr Asn Ile Leu Glu Ile Asn Glu Lys Leu Arg 145 150 155 160

Pro Gln Leu Ala Glu Asn Lys Gln Gln Phe Arg Asn Leu Lys Glu Lys 165 170 175

Cys Phe Val Thr Gln Leu Ala Gly Phe Leu Ala Asn Arg Gln Lys Lys 180 185 190

Tyr Lys Tyr Glu Glu Cys Lys Asp Leu Ile Lys Phe Met Leu Arg Asn 195 200 205

Glu Arg Gln Phe Lys Glu Glu Lys Leu Ala Glu Gln Leu Lys Gln Ala 210 215 220

								2	244						
Glu 225	Glu	Leu	Arg	Gln	Tyr 230	Гув	Val	Leu	Val	His 235	Ser	Gln	Glu	Arg	Glu 240
Leu	Thr	Gln	Leu	Arg 245	Glu	Гуз	Leu	Arg	Glu 250	Gly	Arg	Asp	Ala	Ser 255	Cys
Ser	Leu	Asn	Gln 260	His	Leu	Gln	Ala	Leu 265	Leu	Thr	Pro	Asp	Glu 270	Pro	Asp
Lys	Ser	Gln 275	Gly	Gln	Asp	Leu	Gln 280	Glu	Gln	Leu	Ala	Glu 285	Gly	Сув	Arg
Leu	Ala 290	Gln	His	Leu	Val	Gln 295	Lys	Leu	Ser	Pro	Glu 300	Asn	Asp	Asn	Asp
Asp 305	Asp	Glu	Asp	Val	Gln 310	Val	Glu	Val	Ala	Glu 315	ГÀв	Val	Gln	Lys	Ser 320
Ser	Ala	Pro	Arg	Glu 325	Met	Pro	Lys	Ala	Glu 330	Glu	Lys	Glu	Val	Pro 335	Glu
Asp	Ser	Leu	Glu 340	Glu	Сув	Ala	Ile	Thr 345	Сув	Ser	Asn	Ser	His 350	Gly	Pro
Tyr	Asp	Ser 355	Asn	Gln	Pro	His	Arg 360	Lys	Thr	Гув	Ile	Thr 365	Phe	Glu	Glu
Asp	Lys 370	Val	Asp	Ser	Thr	Leu 375	Ile	Gly	Ser	Ser	Ser 380	His	Val	Glu	Trp
Glu 385	Asp	Ala	Val	His	Ile 390	Ile	Pro	Glu	Asn	Glu 395	Ser	qaA	Asp	Glu	Glu 400
Glu	Glu	Glu	Lys	Gly 405	Pro	Val	Ser	Pro	Arg 410	Asn	Leu	Gln	Glu	Ser 415	Glu
Glu	Glu	Glu	Val 420	Pro	Gln	Glu	Ser	Trp 425	Asp	Glu	Gly	Tyr	Ser 430	Thr	Leu
Ser	Ile	Pro 435	Pro	Glu	Met	Leu	Ala 440	Ser	Tyr	Gln	Ser	Tyr 445	Ser	Gly	Thr
Phe	His 450	Ser	Leu	Glu	Glu	Gln 455	Gln	Val	Сув	Met	Ala 460	Val	Asp	Ile	Gly

Gly His Arg Trp Asp Gln Val Lys Lys Glu Asp Gln Glu Ala Thr Gly

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465 470 475 480 Pro Ser Gln Leu Ser Arg Glu Leu Leu Asp Glu Lys Gly Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Gly Tyr Leu 505 Glu Leu Thr Asp Ser Cys Gln Pro Tyr Arg Ser Ala Phe Tyr Ile Leu Glu Gln Gln Arg Val Gly Trp Ala Leu Asp Met Asp Glu Ile Glu Lys 530 535 540 Tyr Gln Glu Val Glu Glu Asp Gln Asp Pro Ser Cys Pro Arg Leu Ser 545 Arg Glu Leu Leu Asp Glu Lys Glu Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Gly Tyr Leu Glu Leu Pro Asp Leu 580 585 Gly Gln Pro Tyr Arg Ser Ala Val His Ser Leu Glu Glu Gln Tyr Leu Gly Leu Ala Leu Asp Val Asp Arg Ile Lys Lys Asp Gln Glu Glu Glu 615 620 Glu Asp Gln Gly Pro Pro Cys Pro Arg Leu Ser Arg Glu Leu Leu Glu Ala Val Glu Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Ser Cys Leu Glu Gln Pro Asp Ser Cys Leu Pro Tyr Gly 665 Ser Ser Phe Tyr Ala Leu Glu Glu Lys His Val Gly Phe Ser Leu Asp Val Gly Glu Ile Glu Lys Lys Gly Lys Gly Lys Lys Arg Arg Gly Arg 690 695 700 Arg Ser Thr Lys Lys Arg Arg Arg Gly Arg Lys Glu Gly Glu Glu 705 710 715

Asp Gln Asn Pro Pro Cys Pro Arg Leu Ser Arg Glu Leu Leu Asp Glu

Lys Gly Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr

Pro Ser Gly Tyr Leu Glu Leu Thr Asp Ser Cys Gln Pro Tyr Arg Ser 760

Ala Phe Tyr Leu Leu Glu Gln Gln Arg Val Glu Leu Arg Pro 775

<210> 205 <211> 449 <212> PRT <213> Homo sapien

<400> 205

Met Ala Phe Ala Arg Arg Leu Leu Arg Gly Pro Leu Ser Gly Pro Leu

Leu Gly Arg Arg Gly Val Cys Ala Gly Ala Met Ala Pro Pro Arg Arg

Phe Val Leu Glu Leu Pro Asp Cys Thr Leu Ala His Phe Ala Leu Gly

Ala Asp Ala Pro Gly Asp Ala Asp Ala Pro Asp Pro Arg Leu Ala Ala

Leu Leu Gly Pro Pro Glu Arg Ser Tyr Ser Leu Cys Val Pro Val Thr

Pro Asp Ala Gly Cys Gly Ala Arg Val Arg Ala Ala Arg Leu His Gln

Arg Leu Leu His Gln Leu Arg Arg Gly Pro Phe Gln Arg Cys Gln Leu 105

Leu Arg Leu Cys Tyr Cys Pro Gly Gly Gln Ala Gly Gly Ala Gln

Gln Gly Phe Leu Leu Arg Asp Pro Leu Asp Asp Pro Asp Thr Arg Gln 130 135

Ala Leu Leu Glu Leu Gly Ala Cys Gln Glu Ala Pro Arg Pro His 145 150 155 160

Leu Gly Glu Phe Glu Ala Asp Pro Arg Gly Gln Leu Trp Gln Arg Leu 165 170 175

Trp Glu Val Gln Asp Gly Arg Arg Leu Gln Val Gly Cys Ala Gln Val
180 185 190

Val Pro Val Pro Glu Pro Pro Leu His Pro Val Val Pro Asp Leu Pro 195 200 205

Ser Ser Val Val Phe Pro Asp Arg Glu Ala Ala Arg Ala Val Leu Glu 210 215 220

Glu Cys Thr Ser Phe Ile Pro Glu Ala Arg Ala Val Leu Asp Leu Val 225 230 235 240

Asp Gln Cys Pro Lys Gln Ile Gln Lys Gly Lys Phe Gln Val Val Ala 245 250 255

Ile Glu Gly Leu Asp Ala Thr Gly Lys Thr Thr Val Thr Gln Ser Val
260 265 270

Ala Asp Ser Leu Lys Ala Val Leu Leu Lys Ser Pro Pro Ser Cys Ile 275 280 285

Gly Gln Trp Arg Lys Ile Phe Asp Asp Glu Pro Thr Ile Ile Arg Arg 290 295 300

Ala Phe Tyr Ser Leu Gly Asn Tyr Ile Val Ala Ser Glu Ile Ala Lys 305 310 315 320

Glu Ser Ala Lys Ser Pro Val Ile Val Asp Arg Tyr Trp His Ser Thr 325 330 335

Ala Thr Tyr Ala Ile Ala Thr Glu Val Ser Gly Gly Leu Gln His Leu 340 345 350

Pro Pro Ala His His Pro Val Tyr Gln Trp Pro Glu Asp Leu Leu Lys 355 360 365

Pro Asp Leu Ile Leu Leu Thr Val Ser Pro Glu Glu Arg Leu Gln 370 375 380

Arg Leu Gln Gly Arg Gly Met Glu Lys Thr Arg Glu Glu Ala Glu Leu

390 395 385 400

Glu Ala Asn Ser Val Phe Arg Gln Lys Val Glu Met Ser Tyr Gln Arg

Met Glu Asn Pro Gly Cys His Val Val Asp Ala Ser Pro Ser Arg Glu

Lys Val Leu Gln Thr Val Leu Ser Leu Ile Gln Asn Ser Phe Ser Glu 440

Pro

<210> 206 <211> 590 <212> PRT

<213> Homo sapien

<400> 206

Pro Lys Ala Asn Glu Gln Leu Asn Arg Arg Ser Gln Arg Leu Gln Gln

Leu Thr Glu Val Ser Arg Arg Ser Leu Arg Ser Arg Glu Ile Gln Gly 20 25

Gln Val Gln Ala Val Lys Gln Ser Leu Pro Pro Thr Lys Lys Glu Gln

Cys Ser Ser Thr Gln Ser Lys Ser Asn Lys Thr Ser Gln Lys His Val 50

Lys Arg Lys Val Leu Glu Val Lys Ser Asp Ser Lys Glu Asp Glu Asn 70

Leu Val Ile Asn Glu Val Ile Asn Ser Pro Lys Gly Lys Lys Arg Lys

Val Glu His Gln Thr Ala Cys Ala Cys Ser Ser Gln Cys Met Gln Gly 100 105

Ser Glu Lys Cys Pro Gln Lys Thr Thr Arg Arg Asp Glu Thr Lys Pro

Val Pro Val Thr Ser Glu Val Lys Arg Ser Lys Met Ala Thr Ser Val 135

145	Pro	гув	гÀз	Asn	150	Met	гЛа	гув	Ser	Val 155	His	Thr	GIn	Val	16(
Thr	Asn	Thr	Thr	Leu 165	Pro	ГÀЗ	Ser	Pro	Gln 170	Pro	Ser	Val	Pro	Glu 175	Glr
Ser	Asp	Asn	Glu 180	Leu	Glu	Gln	Ala	Gly 185	ГÀЗ	Ser	Ьys	Arg	Gly 190	Ser	Ile
Leu	Gln	Leu 195	Сув	Glu	Glu	Ile	Ala 200	Gly	Glu	Ile	Glu	Ser 205	Asp	Asn	Val
Glu	Val 210	Lys	Lув	Glu	Ser	Ser 215	Gln	Met	Glu	Ser	Val 220	ГÀв	Glu	Glu	Lys
Pro 225	Thr	Glu	Ile	ГÀЗ	Leu 230	Glu	Glu	Thr	Ser	Val 235	Glu	Arg	Gln	Ile	Leu 240
His	Gln	Lys	Glu	Thr 245	Asn	Gln	Asp	Val	Gln 250	Cys	Asn	Arg	Phe	Phe 255	Pro
Ser	Arg	ГÀв	Thr 260	Lys	Pro	Val	ГÀв	Cys 265	Ile	Leu	Asn	Gly	Ile 270	Asn	Ser
Ser	Ala	Lув 275	ГÀв	Asn	Ser	Asn	Trp 280	Thr	Lys	Ile	Lув	Leu 285	Ser	ГÀЗ	Phe
Asn	Ser 290	Val	Gln	His	Asn	Lys 295	Leu	Asp	Ser	Ģln	Val 300	Ser	Pro	Lys	Leu
Gly 305	Leu	Leu	Arg	Thr	Ser 310	Phe	Ser	Pro	Pro	Ala 315	Leu	Glu	Met	His	His 320
Pro	Val	Thr	Gln	Ser 325	Thr	Phe	Leu	Gly	Thr 330	Lys	Leu	His	Asp	Arg 335	Asn
	Thr		340					345					350		
Lys	Ile	Asn 355	Asp	Ile	Thr	Val	Glu 360	Ile	Asn	Lys	Thr	Thr 365	Glu	Arg	Ala
Pro	Glu 370	Asn	Сув	His	Leu	Ala 375	Asn	Glu	Ile	ГÀв	Pro 380	Ser	Asp	Pro	Pro

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Leu Asp Asn Gln Met Lys His Ser Phe Asp Ser Ala Ser Asn Lys Asn 385 390 395 400

Phe Ser Gln Cys Leu Glu Ser Lys Leu Glu Asn Ser Pro Val Glu Asn 405 410 415

Val Thr Ala Ala Ser Thr Leu Leu Ser Gln Ala Lys Ile Asp Thr Gly
420 425 430

Glu Asn Lys Phe Pro Gly Ser Ala Pro Gln Gln His Ser Ile Leu Ser 435 440 445

Asn Gln Thr Ser Lys Ser Ser Asp Asn Arg Glu Thr Pro Arg Asn His 450 455 460

Ser Leu Pro Lys Cys Asn Ser His Leu Glu Ile Thr Ile Pro Lys Asp 465 470 475 480

Leu Lys Leu Lys Glu Ala Glu Lys Thr Asp Glu Lys Gln Leu Ile Ile 485 490 495

Asp Ala Gly Gln Lys Arg Phe Gly Ala Val Ser Cys Asn Val Cys Gly 500 505 510

Met Leu Tyr Thr Ala Ser Asn Pro Glu Asp Glu Thr Gln His Leu Leu 515 520 525

Phe His Asn Gln Phe Ile Ser Ala Val Lys Tyr Val Val Leu Leu Ile 530 535 540

Asn His His Glu Cys Gly Ser Glu Glu Glu Phe Ile Thr Ser Leu Phe 545 550 560

Leu Ser Met Phe Asn Phe Arg Tyr Thr Gln Arg Ser Phe Ser Phe Pro 565 570 575

Ile Arg Phe Leu Glu Gly Leu Glu Glu Arg Lys Asn Ser Gly 580 585 590

<210> 207

<211> 661

<212> PRT

<213> Homo sapien

<400> 207

Met Gln Gly Ser Glu Lys Cys Pro Gln Lys Thr Thr Arg Arg Asp Glu

10 15

Thr	Lys	Pro	Val 20	Pro	Val	Thr	Ser	Glu 25	Val	Lys	Arg	Ser	Lys 30	Met	Ala
Thr	Ser	Val 35	Val	Pro	Lys	ГÀВ	Asn 40	Glu	Met	Lys	ГХв	Ser 45	Val	His	Thr
Gln	Val 50	Asn	Thr	Asn	Thr	Thr 55	Leu	Pro	Lys	Ser	Pro 60	Gln	Pro	Ser	Val
Pro 65	Glu	Gln	Ser	qaA	Asn 70	Glu	Leu	Glu	Gln	Ala 75	Gly	Lys	Ser	Lys	Arg 80
Gly	Ser	Ile	Leu	Gln 85	Leu	Сув	Glu	Glu	Ile 90	Ala	Gly	Glu	Ile	Glu 95	Ser
Asp	Asn	Val	Glu 100	Val	Lys	Lys	Glu	Ser 105	Ser	Gln	Met	Glu	Ser 110	Val	Lys
Glu	Glu	Lys 115	Pro	Thr	Glu	Ile	Lys 120	Leu	Glu	Glu	Thr	Ser 125	Val	Glu	Arg
Gln	Ile 130	Leu	His	Gln	Lys	Glu 135	Thr	Asn	Gln	Asp	Val 140	Gln	Сув	Asn	Arg
Phe 145	Phe	Pro	Ser	Arg	Lys 150	Thr	ГÀв	Pro	Val	Lys 155	Сув	Ile	Leu	Asn	Gly 160
Ile	Asn	Ser	Ser	Ala 165	Lys	Lys	Asn	Ser	Asn 170	Trp	Thr	Lys	Ile	Lys 175	Leu
Ser	Lys	Phe	Asn 180	Ser	Val	Gln	His	Asn 185	Lys	Leu	Asp	Ser	Gln 190	Val	Ser
Pro	Гув	Leu 195	Gly	Leu	Leu	Arg	Thr 200	Ser	Phe	Ser	Pro	Pro 205	Ala	Leu	Glu
Met	His 210	His	Pro	Val	Thr	Gln 215	Ser	Thr	Phe	Leu	Gly 220	Thr	Lys	Leu	His
Asp 225	Arg	Asn	Ile	Thr	Сув 230	Gln	Gln	Glu	ГХв	Met 235	Lys	Glu	Ile	Asn	Ser 240
Glu	Glu	Val	Lys	Ile 245	Asn	Asp	Ile	Thr	Val 250	Glu	Ile	Asn	ГЛЗ	Thr 255	Thr

Glu	Arg	Ala	Pro	Glu	Asn	Cys	His	Leu	Ala	Asn	Glu	Ile	Lys	Pro	Ser
			260					265					270		

- Asp Pro Pro Leu Asp Asn Gln Met Lys His Ser Phe Asp Ser Ala Ser 275 280 285
- Asn Lys Asn Phe Ser Gln Cys Leu Glu Ser Lys Leu Glu Asn Ser Pro 290 295 300
- Val Glu Asn Val Thr Ala Ala Ser Thr Leu Leu Ser Gln Ala Lys Ile 305 310 315 320
- Asp Thr Gly Glu Asn Lys Phe Pro Gly Ser Ala Pro Gln Gln His Ser 325 330 335
- Ile Leu Ser Asn Gln Thr Ser Lys Ser Ser Asp Asn Arg Glu Thr Pro 340 345 350
- Arg Asn His Ser Leu Pro Lys Cys Asn Ser His Leu Glu Ile Thr Ile 355 360 365
- Pro Lys Asp Leu Lys Leu Lys Glu Ala Glu Lys Thr Asp Glu Lys Gln 370 375 380
- Leu Ile Ile Asp Ala Gly Gln Lys Arg Phe Gly Ala Val Ser Cys Asn 385 390 395 400
- Val Cys Gly Met Leu Tyr Thr Ala Ser Asn Pro Glu Asp Glu Thr Gln
 405 410 415
- His Leu Leu Phe His Asn Gln Phe Ile Ser Ala Val Lys Tyr Val Val 420 425 430
- Leu Leu Ile Asn His His Glu Cys Gly Ser Glu Glu Glu Phe Ile Thr 435 440 445
- Ser Leu Phe Leu Ser Met Phe Asn Phe Arg Tyr Thr Gln Arg Ser Phe 450 455 460
- Ser Phe Pro Ile Arg Phe Leu Glu Gly Trp Lys Lys Glu Arg Ile Leu 465 470 475 480
- Ala Glu Tyr Pro Asp Gly Arg Ile Ile Met Val Leu Pro Glu Asp Pro 485 490 495

253

Lys Tyr Ala Leu Lys Lys Val Asp Glu Ile Arg Glu Met Val Asp Asn 500 505

Asp Leu Gly Phe Gln Gln Ala Pro Leu Met Cys Tyr Ser Arg Thr Lys 515 520 525

Thr Leu Leu Phe Ile Ser Asn Asp Lys Lys Val Val Gly Cys Leu Ile 530 535 540

Ala Glu His Ile Gln Trp Gly Tyr Arg Val Ile Glu Glu Lys Leu Pro 545 550 555 560

Val Ile Arg Ser Glu Glu Glu Lys Val Arg Phe Glu Arg Gln Lys Ala 565 570 575

Trp Cys Cys Ser Thr Leu Pro Glu Pro Ala Ile Cys Gly Ile Ser Arg 580 585 590

Ile Trp Val Phe Ser Met Met Arg Arg Lys Lys Ile Ala Ser Arg Met 595 600 605

Ile Glu Cys Leu Arg Ser Asn Phe Ile Tyr Gly Ser Tyr Leu Ser Lys 610 615 620

Glu Glu Ile Ala Phe Ser Asp Pro Thr Pro Asp Gly Lys Leu Phe Ala 625 630 635 640

Thr Gln Tyr Cys Gly Thr Gly Gln Phe Leu Val Tyr Asn Phe Ile Asn 645 650 655

Gly Gln Asn Ser Thr 660

<210> 208

<211> 157

<212> PRT

<213> Homo sapien

<400> 208

Met Thr Thr Val Glu Arg Gly Cys Gly Ser Gly Ala Ala Trp Arg Ala 1 5 10 15

Val Gln Cys Arg Ala Gly Val Ser Gln Gly Leu Val Ala Thr Val Glu 20 25 30

Arg Gly Cys Gly Ser Gly Gly Ser Pro Ala Cys Ser Pro Val Pro Gly 35 40 45

Arg Ser Leu Ala Glu Cys Ser Leu Thr Pro Pro Arg Gly Ser Pro Gly 55

Pro Tyr Arg Leu Pro Gln Leu Gln Ser Trp Val Pro Ser Asp Ala Val

Ala Gly Gln Arg Glu Ala Glu Ala Gly Ser Pro Arg Glu Ala Trp Ala

Pro Ser Pro Gly His Gly Cys Pro Ser Arg Ser Ser Ser Leu Gln Pro 105

Gln Ser Gln Gly Asp Val Gly Thr Gly Val Lys Ser Gly Trp Ser Val

Ala Leu Arg Pro Gln Glu Arg Tyr Gly Leu Lys Pro Ala Ala Arg Ala

Cys His Thr Arg Val Gly Pro Pro Leu His Ile Leu Arg 150

<210> 209

<211> 269

<212> PRT <213> Homo sapien

<400> 209

Met Asp Arg Pro Pro Gly Gln Val Lys Ala Ala Thr Ser Asp Leu Glu

His Tyr Asp Lys Thr Arg His Glu Glu Phe Lys Lys Tyr Glu Met Met

Lys Glu His Glu Arg Arg Glu Tyr Leu Lys Thr Leu Asn Glu Glu Lys 40

Arg Lys Glu Glu Ser Lys Phe Glu Glu Met Lys Lys Lys His Glu 55

Asn His Pro Lys Val Asn His Pro Gly Ser Lys Asp Gln Leu Lys Glu 70 75

Val Trp Glu Glu Thr Asp Gly Leu Asp Pro Asn Asp Phe Asp Pro Lys 85 90

255

Thr Phe Phe Lys Leu His Asp Val Asn Ser Asp Gly Phe Leu Asp Glu 100 105 110

Gln Glu Leu Glu Ala Leu Phe Thr Lys Glu Leu Glu Lys Val Tyr Asp 115 120 125

Pro Lỳs Asn Glu Glu Asp Asp Met Val Glu Met Glu Glu Glu Arg Leu 130 135 140

Arg Met Arg Glu His Val Met Asn Glu Val Asp Thr Asn Lys Asp Arg 145 150 155 160

Leu Val Thr Leu Glu Glu Phe Leu Lys Ala Thr Glu Lys Lys Glu Phe
165 170 175

Leu Glu Pro Asp Ser Trp Glu Thr Leu Asp Gln Gln Gln Phe Phe Thr
180 185 190

Glu Glu Leu Lys Glu Tyr Glu Asn Ile Ile Ala Leu Gln Glu Asn 195 200 205

Glu Leu Lys Lys Lys Ala Asp Glu Leu Gln Lys Gln Lys Glu Glu Leu 210 215 220

Gln Arg Gln His Asp Gln Leu Glu Ala Gln Lys Leu Glu Tyr His Gln 225 230 235 240

Val Ile Gln Gln Met Glu Gln Lys Lys Leu Gln Gln Gly Ile Pro Pro 245 250 255

Ser Gly Pro Ala Gly Glu Leu Lys Phe Glu Pro His Ile 260 265

<210> 210

<211> 363

<212> PRT

<213> Homo sapien

<400> 210

Met Arg Trp Arg Thr Ile Leu Leu Gln Tyr Cys Phe Leu Leu Ile Thr 1 5 10 15

Cys Leu Leu Thr Ala Leu Glu Ala Val Pro Ile Asp Ile Asp Lys Thr

Lys Val Gln Asn Ile His Pro Val Glu Ser Ala Lys Ile Glu Pro Pro 35 40 45

256

Asp	Thr	Gly	Leu	Tyr	Tyr	Asp	Glu	Tyr	Leu	Lys	Gln	Val	Ile	Asp	Val
	50					55					60				

- Leu Glu Thr Asp Lys His Phe Arg Glu Lys Leu Gln Lys Ala Asp Ile
- Glu Glu Ile Lys Ser Gly Arg Leu Ser Lys Glu Leu Asp Leu Val Ser 90
- His His Val Arg Thr Lys Leu Asp Glu Leu Lys Arg Gln Glu Val Gly
- Arg Leu Arg Met Leu Ile Lys Ala Lys Leu Asp Ser Leu Gln Asp Ile
- Gly Met Asp His Gln Ala Leu Leu Lys Gln Phe Asp His Leu Asn His 135
- Leu Asn Pro Asp Lys Phe Glu Ser Thr Asp Leu Asp Met Leu Ile Lys
- Ala Ala Thr Ser Asp Leu Glu His Tyr Asp Lys Thr Arg His Glu Glu 165 170
- Phe Lys Lys Tyr Glu Met Met Lys Glu His Glu Arg Arg Glu Tyr Leu 180
- Lys Thr Leu Asn Glu Glu Lys Arg Lys Glu Glu Glu Ser Lys Phe Glu 195 200
- Glu Met Lys Lys His Glu Asn His Pro Lys Val Asn His Pro Gly 220
- Ser Lys Asp Gln Leu Lys Glu Val Trp Glu Glu Thr Asp Gly Leu Asp 225 230
- Pro Asn Asp Phe Asp Pro Lys Thr Phe Phe Lys Leu His Asp Val Asn 245 250
- Ser Asp Gly Phe Leu Asp Glu Glu Glu Leu Glu Ala Leu Phe Thr Lys
- Glu Leu Glu Lys Val Tyr Asp Pro Lys Asn Glu Glu Asp Asp Met Val 275 280

257

Glu Met Glu Glu Glu Arg Leu Arg Met Arg Glu His Val Met Asn Glu 290 295 300

Val Asp Thr Asn Lys Asp Arg Leu Val Thr Leu Glu Glu Phe Leu Lys 305 310 315 320

Ala Thr Glu Lys Lys Glu Phe Leu Glu Pro Asp Ser Trp Glu Val Ile 325 330 335

Gln Gln Met Glu Gln Lys Lys Leu Gln Gln Gly Ile Pro Pro Ser Gly 340 345 350

Pro Ala Gly Glu Leu Lys Phe Glu Pro His Ile 355 360

<210> 211

<211> 420

<212> PRT

<213> Homo sapien

<400> 211

Met Arg Trp Arg Thr Ile Leu Leu Gln Tyr Cys Phe Leu Leu Ile Thr 1 5 10 15

Cys Leu Leu Thr Ala Leu Glu Ala Val Pro Ile Asp Ile Asp Lys Thr
20 25 30

Lys Val Gln Asn Ile His Pro Val Glu Ser Ala Lys Ile Glu Pro Pro 35 40 45

Asp Thr Gly Leu Tyr Tyr Asp Glu Tyr Leu Lys Gln Val Ile Asp Val 50 55 60

Leu Glu Thr Asp Lys His Phe Arg Glu Lys Leu Gln Lys Ala Asp Ile 65 70 75 80

Glu Glu Ile Lys Ser Gly Arg Leu Ser Lys Glu Leu Asp Leu Val Ser 85 90 95

His His Val Arg Thr Lys Leu Asp Glu Leu Lys Arg Gln Glu Val Gly
100 105 110

Arg Leu Arg Met Leu Ile Lys Ala Lys Leu Asp Ser Leu Gln Asp Ile 115 120 125

Gly Met Asp His Gln Ala Leu Leu Lys Gln Phe Asp His Leu Asn His

. 258

					•					200						
		130					135					140				
	eu 45	Asn	Pro	Asp	Lys	Phe 150	Glu	Ser	Thr	Asp	Leu 155	Asp	Met	Leu	Ile	Lys 160
A.	la	Ala	Thr	Ser	Asp 165	Leu	Glu	His	Tyr	Asp 170	Гув	Thr	Arg	His	Glu 175	Glu
Pl	he	Lys	Lys	Tyr 180	Glu	Met	Met	ГÀв	Glu 185	His	Glu	Arg	Arg	Glu 190	Tyr	Leu
L	ys	Thr	Leu 195	Asn	Glu	Glu	Lys	Arg 200	Lys	Glu	Glu	Glu	Ser 205	Lys	Phe	Glu
G:	lu	Met 210	ГÀв	Lys	Гув	His	Glu 215	Asn	His	Pro	ГÀВ	Val 220	Asn	His	Pro	Gly
	er 25	Lys	Asp	Gln	Leu	Lys 230	Glu	Val	Trp	Glu	Glu 235	Thr	Asp	Gly	Leu	Asp 240
Pi	ro	Asn	Asp	Phe	Asp 245	Pro	Lys	Thr	Phe	Phe 250	Lys	Leu	His	Asp	Val 255	Asn
Se	er	Asp	Gly	Phe 260	Leu	Asp	Glu	Gln	Glu 265	Leu	Glu	Ala	Leu	Phe 270	Thr	Lys
G.	lu	Leu	Glu 275	Lys	Val	Tyr	Asp	Pro 280	Lys	Asn	Glu	Glu	Asp 285	Asp	Met	Val
G:	lu	Met 290	Glu	Glu	Glu	Arg	Leu 295	Arg	Met	Arg	Glu	His 300	Val	Met	Asn	Glu
	al 05	Asp	Thr	Asn	ГЛа	Asp 310	Arg	Leu	Val	Thr	Leu 315	Glu	Glu	Phe	Leu	Lys 320
A	la	Thr	Glu	Lys	Lys 325	Glu	Phe	Leu	Glu	Pro 330	Asp	Ser	Trp	Glu	Thr 335	Leu
As	qв	Gln	Gln	Gln 340	Phe	Phe	Thr	Glu	Glu 345	Glu	Leu	Lys	Glu	Tyr 350	Glu	Asn
IJ	le	Ile	Ala 355	Leu	Gln	Glu	Asn	Glu 360	Leu	Lys	Lys	Lys	Ala 365	Asp	Glu	Leu
G1	ln	Lys 370	Gln	Lys	Glu	Glu	Leu 375	Gln	Arg	Gln	His	Двр 380	Gln	Leu	Glu	Ala

Gln Lys Leu Glu Tyr His Gln Val Ile Gln Gln Met Glu Gln Lys Lys 385 390 395 400

Leu Gln Gln Gly Ile Pro Pro Ser Gly Pro Ala Gly Glu Leu Lys Phe
405 410 415

Glu Pro His Ile 420

<210> 212

<211> 162

<212> PRT

<213> Homo sapien

<400> 212

Met Gln Thr Ser Val Thr Trp Glu Ile Pro Phe Pro Thr Asn Ser Leu 1 5 10 15

Val Val Lys Leu His Ser Met Asp Lys Ile Thr Tyr Tyr His Lys Ile 20 25 30

Lys Lys Cys Ile Phe Ser Ala Leu Arg Ala Arg Asn Thr Arg Arg Ser 35 40 45

Ile Lys Leu Asp Gly Lys Gly Glu Pro Lys Gly Ala Lys Arg Ala Lys 50 55 60

Pro Val Lys Tyr Thr Ala Ala Lys Leu His Glu Lys Gly Val Leu Leu 65 70 75 80

Asp Ile Asp Asp Leu Gln Thr Asn Gln Phe Lys Asn Val Thr Phe Asp 85 90 95

Ile Ile Ala Thr Glu Asp Val Gly Ile Phe Asp Val Arg Ser Lys Phe
100 105 110

Leu Gly Val Glu Met Glu Lys Val Gln Leu Asn Ile Gln Asp Leu Leu 115 120 125

Gln Met Gln Tyr Glu Gly Val Ala Val Met Lys Met Phe Asp Lys Val 130 135 140

Lys Val Asn Val Asn Leu Leu Ile Tyr Leu Leu Asn Lys Lys Phe Tyr 145 150 155 160

260

Gly Lys

<210> 213

<211> 69

<212> PRT <213> Homo sapien

<400> 213

Tyr Phe Thr Leu Phe Tyr Tyr Lys Phe Arg Ser Leu Cys Phe Thr Ile 10

Asn Ser Asp Tyr Pro Asn Ile Phe Leu Ile Leu Cys Gly Asn Ala Asp 20 25

Phe Leu Leu Leu Arg Ser Gly Asn Ile Leu His Cys Leu His Ser Ser 40

His Gly Thr Trp Lys Phe Leu Lys Val Ile Tyr Asp Thr His Phe Leu

Cys Met Tyr Ser Asn

<210> 214

<211> 42

<212> PRT

<213> Homo sapien

<400> 214

Gln Ser Ser Ala Glu Ala Gly Gly Gly Asp Glu Arg Glu Ile Asn Thr

Tyr Gly Arg Trp Ala Leu Met Gln Cys Glu Arg Arg Ser Val Met Asp

Val Arg Gly Arg Gly Thr Ser Glu Leu Pro

<210> 215

<211> 172

<212> PRT

<213> Homo sapien

<400> 215

Gly Thr Gly Leu Pro Trp His Ser Thr Pro Ala Gln Leu Ala Leu Ala

261

Gly Leu Arg Gln Ala Gln Pro His Pro Gln Gln Gln Arg Leu His Gln 25

Pro Gly Leu Arg Gly Val Asp Ala His Gly Ser Ala Ala His Val Pro

Gln Ala Val Pro Gln Ala Val Arg Ala His Pro Pro Gly Gln Leu Leu

Ser Trp Ala Ala Ala Val Cys Leu Leu Cys Gln His His Leu Gln Leu

Pro Gly Lys Lys Arg Asn Ser Thr Leu Tyr Ile Thr Met Leu Leu Ile

Val Pro Val Ile Val Ala Gly Ala Ile Ile Val Leu Leu Tyr Leu

Lys Arg Leu Lys Ile Ile Ile Phe Pro Pro Ile Pro Asp Pro Gly Lys

Ile Phe Lys Glu Met Phe Gly Asp Gln Asn Asp Asp Thr Leu His Trp 135 140

Lys Lys Tyr Asp Ile Tyr Glu Lys Gln Thr Lys Glu Glu Thr Asp Ser 145 150 155

Val Val Leu Ile Glu Asn Leu Lys Lys Ala Ser Gln 165

<210> 216 <211> 134

<212> PRT

<213> Homo sapien

<400> 216

Met Arg Met Ala Ala Leu Pro Thr Phe Arg Lys Leu Phe Arg Lys Leu

Tyr Gly His Ile Arg Gln Gly Asn Tyr Ser Ala Gly Leu Pro Arg Cys 20 25

Val Tyr Cys Val Asn Ile Thr Tyr Asn Tyr Leu Gly Lys Lys Arg Asn 35

Ser Thr Leu Tyr Ile Thr Met Leu Leu Ile Val Pro Val Ile Val Ala 50

262

Gly Ala Ile Ile Val Leu Leu Leu Tyr Leu Lys Arg Leu Lys Ile Ile

Ile Phe Pro Pro Ile Pro Asp Pro Gly Lys Ile Phe Lys Glu Met Phe

Gly Asp Gln Asn Asp Asp Thr Leu His Trp Lys Lys Tyr Asp Ile Tyr

Glu Lys Gln Thr Lys Glu Glu Thr Asp Ser Val Val Leu Ile Glu Asn 120

Leu Lys Lys Ala Ser Gln 130

<210> 217

<211> 396

<212> PRT

<213> Homo sapien

<400> 217

Met Leu Met Ala Lys Gly Lys Leu Lys Pro Thr Gln Asn Ala Ser Glu

Lys Leu Gln Ala Pro Gly Lys Gly Leu Thr Ser Asn Lys Ser Lys Asp

Asp Leu Val Val Ala Glu Val Glu Ile Asn Asp Val Pro Leu Thr Cys

Arg Asn Leu Leu Thr Arg Gly Gln Thr Gln Asp Glu Ile Ser Arg Leu

Ser Gly Ala Ala Val Ser Thr Arg Gly Arg Phe Met Thr Thr Glu Glu

Lys Ala Lys Val Gly Pro Gly Asp Arg Pro Leu Tyr Leu His Val Gln

Gly Gln Thr Arg Glu Leu Val Asp Arg Ala Val Asn Arg Ile Lys Glu 100 105

Ile Ile Thr Asn Gly Val Val His Gln Pro Ala Pro Ile Ala Gln Leu 115 120

Ser Pro Ala Val Ser Gln Lys Pro Pro Phe Gln Ser Gly Met His Tyr 130 135 140

Val Gln Asp Lys Leu Phe Val Gly Leu Glu His Ala Val Pro Thr Phe 145 150 155 160

Asn Val Lys Glu Lys Val Glu Gly Pro Gly Cys Ser Tyr Leu Gln His 165 170 175

Ile Gln Ile Glu Thr Gly Ala Lys Val Phe Leu Arg Gly Lys Gly Ser 180 185 190

Gly Cys Ile Glu Pro Ala Ser Gly Arg Glu Ala Phe Glu Pro Met Tyr 195 200 205

Ile Tyr Ile Ser His Pro Lys Pro Glu Gly Leu Ala Ala Lys Lys 210 215 220

Leu Cys Glu Asn Leu Leu Gln Thr Val His Ala Glu Tyr Ser Arg Phe 225 230 235

Val Asn Gln Ile Asn Thr Ala Val Pro Leu Pro Gly Tyr Thr Gln Pro 245 250 255

Ser Ala Ile Ser Ser Val Pro Pro Gln Pro Pro Tyr Tyr Pro Ser Asn 260 265 270

Gly Tyr Gln Ser Gly Tyr Pro Val Val Pro Pro Pro Gln Gln Pro Val 275 280 285

Gln Pro Pro Tyr Gly Val Pro Ser Ile Val Pro Pro Ala Val Ser Leu 290 295 300

Ala Pro Gly Val Leu Pro Ala Leu Pro Thr Gly Val Pro Pro Val Pro 305 310 315 320

Thr Gln Tyr Pro Ile Thr Gln Val Gln Pro Pro Ala Ser Thr Gly Gln 325 330 335

Ser Pro Met Gly Gly Pro Phe Ile Pro Ala Ala Pro Val Lys Thr Ala 340 345 350

Leu Pro Ala Gly Pro Gln Pro Gln Pro Gln Pro Pro Leu Pro 355 360 365

Ser Gln Pro Gln Ala Gln Lys Arg Arg Phe Thr Glu Glu Leu Pro Asp

370 375 380

Glu Arg Glu Ser Gly Leu Leu Gly Tyr Gln Val Lys 385 390 395

<210> 218

<211> 255

<212> PRT

<213> Homo sapien

<400> 218

Met His Tyr Val Gln Asp Lys Leu Phe Val Gly Leu Glu His Ala Val 1 5 10 15

Pro Thr Phe Asn Val Lys Glu Lys Val Glu Gly Pro Gly Cys Ser Tyr 20 25 30

Leu Gln His Ile Gln Ile Glu Thr Gly Ala Lys Val Phe Leu Arg Gly 35 40 45

Lys Gly Ser Gly Cys Ile Glu Pro Ala Ser Gly Arg Glu Ala Phe Glu 50 55 60

Pro Met Tyr Ile Tyr Ile Ser His Pro Lys Pro Glu Gly Leu Ala Ala 65 70 75 80

Ala Lys Lys Leu Cys Glu Asn Leu Leu Gln Thr Val His Ala Glu Tyr 85 90 95

Ser Arg Phe Val Asn Gln Ile Asn Thr Ala Val Pro Leu Pro Gly Tyr
100 105 110

Thr Gln Pro Ser Ala Ile Ser Ser Val Pro Pro Gln Pro Pro Tyr Tyr 115 120 125

Pro Ser Asn Gly Tyr Gln Ser Gly Tyr Pro Val Val Pro Pro Pro Gln 130 135 140

Val Ser Leu Ala Pro Gly Val Leu Pro Ala Leu Pro Thr Gly Val Pro 165 170 175

Pro Val Pro Thr Gln Tyr Pro Ile Thr Gln Val Gln Pro Pro Ala Ser 180 185 190

265

Thr Gly Gln Ser Pro Met Gly Gly Pro Phe Ile Pro Ala Ala Pro Val 200

Lys Thr Ala Leu Pro Ala Gly Pro Gln Pro Gln Pro Gln Pro

Pro Leu Pro Ser Gln Pro Gln Ala Gln Lys Arg Arg Phe Thr Glu Glu 225

Leu Pro Asp Glu Arg Glu Ser Gly Leu Leu Gly Tyr Gln Val Lys

<210> 219

<211> 412 <212> PRT <213> Homo sapien

<400> 219

Lys Ile Val Asp Val Ile Arg Gln Glu Val Leu Glu Ser Ser Gln Val

Thr Phe Val His His Leu Gln Ala Phe Ala Ser Lys Ile Thr Gly Met

Leu Leu Glu Leu Ser Pro Ala Gln Leu Leu Leu Leu Ala Ser Glu 35 40

Asp Ser Leu Arg Ala Arg Val Asp Glu Ala Met Glu Leu Ile Ile Ala 50

His Gly Arg Glu Asn Gly Ala Asp Ser Ile Leu Asp Leu Gly Leu Val 70

Asp Ser Ser Glu Lys Val Gln Gln Glu Asn Arg Lys Arg His Gly Ser

Ser Arg Ser Val Val Asp Met Asp Leu Asp Asp Thr Asp Asp Gly Asp

Asp Asn Ala Pro Leu Phe Tyr Gln Pro Gly Lys Arg Gly Phe Tyr Thr 120

Pro Arg Pro Gly Lys Asn Thr Glu Ala Arg Leu Asn Cys Phe Arg Asn

Ile Gly Arg Ile Leu Gly Leu Cys Leu Leu Gln Asn Glu Leu Cys Pro

266

150 155 145 160 Ile Thr Leu Asn Arg His Val Ile Lys Val Leu Leu Gly Arg Lys Val 170 Asn Trp His Asp Phe Ala Phe Phe Asp Pro Val Met Tyr Glu Ser Leu 185 Arg Gln Leu Ile Leu Ala Ser Gln Ser Ser Asp Ala Asp Ala Val Phe 195 200 Ser Ala Met Asp Leu Ala Phe Ala Ile Asp Leu Cys Lys Glu Glu Gly 210 Gly Gly Gln Val Glu Leu Ile Pro Asn Gly Val Asn Ile Pro Val Thr 225 235 Pro Gln Asn Val Tyr Glu Tyr Val Arg Lys Tyr Ala Glu His Arg Met 245 250 Leu Val Val Ala Glu Gln Pro Leu His Ala Met Arg Lys Gly Leu Leu Asp Val Leu Pro Lys Asn Ser Leu Glu Asp Leu Thr Ala Glu Asp Phe Arg Leu Leu Val Asn Gly Cys Gly Glu Val Asn Val Gln Met Leu Ile Ser Phe Thr Ser Phe Asn Asp Glu Ser Gly Glu Asn Ala Glu Lys Leu Leu Gln Phe Lys Arg Trp Phe Trp Ser Ile Val Glu Lys Met Ser Met 330 Thr Glu Arg Gln Asp Leu Val Tyr Phe Trp Thr Ser Ser Pro Ser Leu Pro Ala Ser Glu Glu Gly Phe Gln Pro Met Pro Ser Ile Thr Ile Arg 355 Pro Pro Asp Asp Gln His Leu Pro Thr Ala Asn Thr Cys Ile Ser Arg 370 375 Leu Tyr Val Pro Leu Tyr Ser Ser Lys Gln Ile Leu Lys Gln Lys Leu 390 395

Leu Leu Ala Ile Lys Thr Lys Asn Phe Gly Phe Val 405

<210> 220

<211> 56 <212> PRT <213> Homo sapien

<400> 220

Gly Lys Lys Lys Phe Asn Phe Gly Arg Leu Cys Tyr Leu Glu Ser Leu

Lys Phe Ser Leu Val Lys Met Asp Cys Ile Leu Leu Leu Thr Lys Ile 25

Ser Arg Ile Met Cys Gly Leu Leu Ile Ser Gly Met Leu Arg Ser Tyr 40

Ser Leu Thr Ile Lys Ile Leu Asn 50

<210> 221 <211> 430 <212> PRT

<213> Homo sapien

<400> 221

Glu Cys Pro Gly Arg Arg Asp Pro Gly Arg Gly Glu Arg Glu Gln Ser 5

Gly Val Arg Ala Ser Leu Trp Ala Gly Leu Gly Leu Gly Arg Arg

Cys Gly Leu Gly Arg Phe Gly Arg Gly Gly Arg Met Met Gly Arg

Val Arg Thr Leu Ala Gly Glu Cys Ser Ala Gln Ala Gln Ala Gln Ser

Leu Leu Ala Val Val Leu Ser Ala Pro Pro Ser Gly Gly Thr Pro Ser

Ala Arg Leu Ser Val Arg Ser Pro Ser Pro Arg Asp Pro Trp Gly Leu 85 90

Trp Ala Pro Val Leu Gln Met Thr Gly Ser Asn Glu Phe Lys Leu Asn

105 100 110 Gln Pro Pro Glu Asp Gly Ile Ser Ser Val Lys Phe Ser Pro Asn Thr 120 Ser Gln Phe Leu Leu Val Ser Ser Trp Asp Thr Ser Val Arg Leu Tyr Asp Val Pro Ala Asn Ser Met Arg Leu Lys Tyr Gln His Thr Gly Ala 145 150 155 Val Leu Asp Cys Ala Phe Tyr Asp Pro Thr His Ala Trp Ser Gly Gly 175 Leu Asp His Gln Leu Lys Met His Asp Leu Asn Thr Asp Gln Glu Asn 185 Leu Val Gly Thr His Asp Ala Pro Ile Arg Cys Val Glu Tyr Cys Pro 195 200 205 Glu Val Asn Val Met Val Thr Gly Ser Trp Asp Gln Thr Val Lys Leu Trp Asp Pro Arg Thr Pro Cys Asn Ala Gly Thr Phe Ser Gln Pro Glu 225 230 Lys Val Tyr Thr Leu Ser Val Ser Gly Asp Arg Leu Ile Val Gly Thr 250 Ala Gly Arg Arg Val Leu Val Trp Asp Leu Arg Asn Met Gly Tyr Val Gln Gln Arg Arg Glu Ser Ser Leu Lys Tyr Gln Thr Arg Cys Ile Arg 280 Ala Phe Pro Asn Lys Gln Gly Tyr Val Leu Ser Ser Ile Glu Gly Arg Val Ala Val Glu Tyr Leu Asp Pro Ser Pro Glu Val Gln Lys Lys 305 Tyr Ala Phe Lys Cys His Arg Leu Lys Glu Asn Asn Ile Glu Gln Ile 325 330 Tyr Pro Val Asn Ala Ile Ser Phe His Asn Ile His Asn Thr Phe Ala 340 345

Thr Gly Gly Ser Asp Gly Phe Val Asn Ile Trp Asp Pro Phe Asn Lys 355 360 365

Lys Arg Leu Cys Gln Phe His Arg Tyr Pro Thr Ser Ile Ala Ser Leu 370 375 380

Ala Phe Ser Asn Asp Gly Thr Thr Leu Ala Ile Ala Ser Ser Tyr Met 385 390 395 400

Tyr Glu Met Asp Asp Thr Glu His Pro Glu Asp Gly Ile Phe Ile Arg 405 410 415

Gln Val Thr Asp Ala Glu Thr Lys Pro Lys Ser Pro Cys Thr 420 425 430

<210> 222

<211> 385

<212> PRT

<213> Homo sapien

<400> 222

Met Gly Arg Val Arg Thr Leu Ala Gly Glu Cys Ser Ala Gln Ala Gln 1 5 10 15

Ala Gln Ser Leu Leu Ala Val Val Leu Ser Ala Pro Pro Ser Gly Gly 20 25 30

Thr Pro Ser Ala Arg Leu Ser Val Arg Ser Pro Ser Pro Arg Asp Pro
35 40 45

Trp Gly Leu Trp Ala Pro Val Leu Gln Met Thr Gly Ser Asn Glu Phe 50 55 60

Lys Leu Asn Gln Pro Pro Glu Asp Gly Ile Ser Ser Val Lys Phe Ser 65 70 75 80

Pro Asn Thr Ser Gln Phe Leu Leu Val Ser Ser Trp Asp Thr Ser Val 85 90 95

Arg Leu Tyr Asp Val Pro Ala Asn Ser Met Arg Leu Lys Tyr Gln His 100 105 110

Thr Gly Ala Val Leu Asp Cys Ala Phe Tyr Asp Pro Thr His Ala Trp 115 120 125 Ser Gly Gly Leu Asp His Gln Leu Lys Met His Asp Leu Asp Thr Asp 135

Gln Glu Asn Leu Val Gly Thr His Asp Ala Pro Ile Arg Cys Val Glu 160

Tyr Cys Pro Glu Val Asn Val Met Val Thr 170 Gly Ser Trp Asp Gln Thr 175

Val Lys Leu Trp Asp Pro Arg Thr Pro Cys Asn Ala Gly Thr Phe Ser 190 Fro 195

Gln Pro Glu Lys Val Tyr Thr Leu Ser Val Ser Gly Asp Asp Asp Leu Ile 210

Val Gly Thr Ala Gly Arg Arg Val Leu Val Trp Asp Leu Arg Asn Met 2210

Tyr Val Gla Arg Ala Phe Pro Asn Lys Gln Gly Tyr Val Leu Ser Ser Ile 255

Glu Gly Arg Val Ala Val Glu Tyr Leu Asp Pro Ser Pro Glu Val Gln
260 265 270

Lys Lys Lys Tyr Ala Phe Lys Cys His Arg Leu Lys Glu Asn Asn Ile 275 280 285

Glu Gln Ile Tyr Pro Val Asn Ala Ile Ser Phe His Asn Ile His Asn 290 295 300

Thr Phe Ala Thr Gly Gly Ser Asp Gly Phe Val Asn Ile Trp Asp Pro 305 310 315 320

Phe Asn Lys Lys Arg Leu Cys Gln Phe His Arg Tyr Pro Thr Ser Ile 325 330 335

Ala Ser Leu Ala Phe Ser Asn Asp Gly Thr Thr Leu Ala Ile Ala Ser 340 345 350

Ser Tyr Met Tyr Glu Met Asp Asp Thr Glu His Pro Glu Asp Gly Ile 355 360 365

Phe Ile Arg Gln Val Thr Asp Ala Glu Thr Lys Pro Lys Ser Pro Cys

271

375 370 380

Thr 385

<210> 223

<211> 123

<212> PRT <213> Homo sapien

<400> 223

Met Pro Ser Ala Met Thr Val Tyr Ala Leu Val Val Val Ser Tyr Phe

Leu Ile Thr Gly Gly Ile Ile Tyr Asp Val Ile Val Glu Pro Pro Ser 25

Val Gly Ser Met Thr Asp Glu His Gly His Gln Arg Pro Val Ala Phe 40

Leu Ala Tyr Arg Val Asn Gly Gln Tyr Ile Met Glu Gly Leu Ala Ser

Ser Phe Leu Phe Thr Met Gly Gly Leu Gly Phe Ile Ile Leu Asp Arg

Ser Asn Ala Pro Asn Ile Pro Lys Leu Asn Arg Phe Leu Leu Phe 85 90

Ile Gly Phe Val Cys Val Leu Leu Ser Phe Phe Met Ala Arg Val Phe 100 105

Met Arg Met Lys Leu Pro Gly Tyr Leu Met Gly 115 120

<210> 224

<211> 211

<212> PRT

<213> Homo sapien

<400> 224

Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys 5 10 15

Lys Lys Gln Lys Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp 25 20

272

Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala

Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln 85 90

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala

Ala Pro Gly Ala Glu Pro Arg Pro Ala Thr His Ala His Ala Gly Leu

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly 135 140

Gly Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln 155

Thr His Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser 165 170

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg 180

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg

Val Val Ala 210

<210> 225

<211> 178

<212> PRT <213> Homo sapien

<400> 225

Met Ala Arg Arg Pro Ala Gly Arg Glu Asn Ser Gly Val Pro Arg Gly

Leu Pro Lys Phe Ser Pro Pro Thr Phe Ser Ala Ala Thr Asn Val Arg 20 25

Ala Ala Gln Arg Gly Arg Pro Arg Ala Pro Asp Ala Thr Arg Arg 40

Thr Ala Arg Ala Gly Thr Thr Pro Pro Arg His Gly Gln Pro Pro Ala

His Ala Arg Ala Ala Pro Ala His Asn Arg Gly Leu Pro Ser Cys Cys

Ser Arg Cys Arg Ala Lys Ala Arg Tyr Ala Arg Pro Arg Arg Ala Glu 90

Ala Ala Arg Ala Arg Arg Ala Thr Pro Ala Ala Pro Gly Trp Arg

Gly Gly Gly Thr Ala Thr Arg Pro Thr Arg Arg Arg Ala Gly Thr Asn 120

Ala His Asp Pro His Arg Asn Gly Glu Gln Arg Pro Ser Gly Gln Arg

Arg Pro Arg Arg Gly Ser Arg Arg Arg His Glu Thr Arg Glu Ser

Glu Arg Pro Leu Arg Gly Ala Gly Pro Gly Val Pro Gly Pro Thr Arg 165 170

Gly Gly

<210> 226 <211> 211 <212> PRT

<213> Homo sapien

<400> 226

Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys 5

Lys Lys Gln Lys Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp 20 25

Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala 35 40

274

Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys
50 55 60

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp 65 70 75 80

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln 85 90 95

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala
100 105 110

Ala Pro Gly Ala Glu Pro Arg Pro Ala Thr His Ala His Ala Gly Leu 115 120 125

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly 130 135 140

Gly Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln 145 150 155 160

Thr His Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser 165 170 175

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg 180 185 190

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg 195 200 205

Val Val Ala 210

<210> 227

<211> 211

<212> PRT

<213> Homo sapien

<400> 227

Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys 1 5 10 15

Lys Lys Gln Lys Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp
20 25 30

Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala 35 40 45

Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys 50 55 60

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp 65 70 75 80

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln 85 90 95

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala
100 105 110

Ala Pro Gly Ala Glu Pro Arg Pro Ala Thr His Ala His Ala Gly Leu 115 120 125

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly 130 135 140

Gly Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln 145 150 155 160

Thr His Thr Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser 165 170 175

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg 180 185 190

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg 195 200 205

Val Val Ala 210

<210> 228

<211> 211

<212> PRT

<213> Homo sapien

<400> 228

Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys 1 5 10 15

Lys Lys Gln Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp 20 25 30

276

Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala 40

Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln 90

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala

Ala Pro Gly Ala Glu Pro Arg Pro Ala Thr His Ala His Ala Gly Leu 120

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly 135

Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln

Thr His Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser 165 170

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg 180 185

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg 195 200

Val Val Ala 210

<210> 229

<211> 211

<212> PRT <213> Homo sapien

<400> 229

Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys 5 10

Lys Lys Gln Lys Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp 20

277

Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala 35 40 45

Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys 50 55 60

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp 65 70 75 80

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln 85 90 95

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala
100 105 110

Ala Pro Gly Ala Glu Pro Arg Pro Ala Thr His Ala His Ala Gly Leu 115 120 125

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly 130 135 140

Gly Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln 145 150 155 160

Thr His Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser 165 170 175

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg 180 185 190

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg 195 200 205

Val Val Ala 210

<210> 230

<211> 211

<212> PRT

<213> Homo sapien

<400> 230

Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys 1 5 10 15

278

Lys Lys Gln Lys Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp

Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala 35 40 45

Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys 50 55 60

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp 65 70 75 80

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln 85 90 95

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala
100 105 110

Ala Pro Gly Ala Glu Pro Arg. Pro Ala Thr His Ala His Ala Gly Leu 115 120 125

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly 130 135 140

Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln 145 150 155 160

Thr His Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser 165 170 175

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg 180 185 190

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg 195 200 205

Val Val Ala 210

<210> 231

<211> 211

<212> PRT

<213> Homo sapien

<400> 231

Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys 1 5 10 15

Lys Lys Gln Lys Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp
20 25 30

Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala 35 40 45

Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys 50 55 60

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp 65 70 75 80

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln 85 90 95

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala 100 105 110

Ala Pro Gly Ala Glu Pro Arg Pro Ala Thr His Ala His Ala Gly Leu 115 120 125

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly 130 135

Gly Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln 145 150 155 160

Thr His Thr Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser 165 170 175

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg 180 185 190

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg 195 200 205

Val Val Ala 210

<210> 232

<211> 211

<212> PRT

<213> Homo sapien

<400> 232

280

Asn Ile Tyr Leu Leu Ile Leu Leu Lys Cys Phe Lys Lys Ile Lys Lys 1 5 10 15

Lys Lys Gln Lys Lys Lys Arg Arg Ala Arg Arg Ala Lys Pro Ala Trp
20 25 30

Pro Trp Arg Gly Asp Pro Arg Gly Ala Lys Thr Val Ala Tyr Leu Ala 35 40 45

Ala Ser Pro Asn Ser Pro His Pro Pro Leu Ala Gln Arg Pro Thr Cys 50 55 60

Ala Pro Arg Ser Gly Gly Gly Arg Asp Glu Arg Arg Thr Leu Arg Asp 65 70 75 80

Gly Arg Arg Gly Pro Ala Pro Arg His His Val Thr Gly Ser Arg Gln 85 90 95

Arg Thr Pro Gly Arg Arg Leu Leu Thr Thr Glu Val Cys Leu Val Ala

Ala Pro Gly Ala Glu Pro Arg Pro Ala Thr His Ala His Ala Gly Leu 115 120 125

Arg Gln Arg His Ala Arg Gly Val Gln Arg Arg Arg His Pro Ala Gly 130 135

Gly Gly Glu Ala Pro Gln His Gly Arg Arg Gly Glu Glu Arg Glu Gln 145 150 155 160

Thr His Thr Thr His Thr Ala Thr Val Ser Asn Asp Arg Ala Ala Ser 165 170 175

Gly Asp Arg Gly Val Ala Ala Gly Asp Asp Ala Thr Arg Arg Ala Arg 180 185 190

Ala Arg Asp His Ser Glu Ala Pro Ala Arg Val Cys Gln Ala Arg Arg 195 200 205

Val Val Ala 210

<210> 233

<211> 24

<212> DNA

<213> Artificial sequence

Synthetic	
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233	
gagaa gacatgaaaa tcca	24
Artificial sequence	
Synthetic	
-	
234	
accc totcaaccta aaaaa	25
	25
235	
Artificial sequence	
Synthetic	
tggt gtttccgaat ttcaggcaa	29
22	
DNA	
DNA Artificial sequence	
Artificial sequence	
Artificial sequence Synthetic	
Artificial sequence Synthetic 236	
Artificial sequence Synthetic	22
Artificial sequence Synthetic 236	22
Artificial sequence Synthetic 236 atta caatgatgga cc	22
Artificial sequence Synthetic 236 atta caatgatgga cc	22
Artificial sequence Synthetic 236 atta caatgatgga cc 237 18	22
Artificial sequence Synthetic 236 atta caatgatgga cc 237 18 DNA	22
Artificial sequence Synthetic 236 atta caatgatgga cc 237 18	22
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Artificial sequence Synthetic 236 atta caatgatgga cc 237 18 DNA Artificial sequence	22
Artificial sequence Synthetic 236 atta caatgatgga cc 237 18 DNA	22
Artificial sequence Synthetic 236 atta caatgatgga cc 237 18 DNA Artificial sequence Synthetic	22
Artificial sequence Synthetic 236 atta caatgatgga cc 237 18 DNA Artificial sequence Synthetic 237	22
Artificial sequence Synthetic 236 atta caatgatgga cc 237 18 DNA Artificial sequence Synthetic 237	
Artificial sequence Synthetic 236 atta caatgatgga cc 237 18 DNA Artificial sequence Synthetic	22
Artificial sequence Synthetic 236 atta caatgatgga cc 237 18 DNA Artificial sequence Synthetic 237	
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Artificial sequence Synthetic 236 atta caatgatgga cc 237 18 DNA Artificial sequence Synthetic 237 aggt gcgagctt 238	
Artificial sequence Synthetic 236 atta caatgatgga cc 237 18 DNA Artificial sequence Synthetic 237 aggt gcgagctt 238 23	
Artificial sequence Synthetic 236 atta caatgatgga cc 237 18 DNA Artificial sequence Synthetic 237 aggt gcgagctt 238 23 DNA	
Artificial sequence Synthetic 236 atta caatgatgga cc 237 18 DNA Artificial sequence Synthetic 237 aggt gcgagctt 238 23	
	234 25 DNA Artificial sequence Synthetic 234 Caccc tgtcaaccta aaaaa 235 29 DNA Artificial sequence Synthetic 235 tggt gtttccgaat ttcaggcaa

282

<223>	Synthetic	
<400>		
agtgag	eget tagatggeca gea	23
<210>	239	
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acaata	aatc agtaagcgtt ccagaa	26
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<223>	Synthetic	
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caatcta	acat taaaaacata cacgtgaaca	30
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	Artificial sequence	
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<400>		
cttcttc	cacc teetgageea etea	24